

BLACK ATHENA

Previous volumes by Martin Bernal:

Black Athena
The Afroasiatic Roots of Classical Civilization
Volume I
The Fabrication of Ancient Greece 1785–1985

Black Athena
The Afroasiatic Roots of Classical Civilization
Volume II
The Archaeological and Documentary Evidence

Black Athena

The Afroasiatic Roots
of Classical Civilization

Volume III
The Linguistic Evidence

Martin Bernal

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*To my mentor Edwin Pulleyblank
who taught me to look thoroughly and think broadly
and to my family for their love and support over
the 30 years this project has taken.*

CONTENTS

<i>Preface and Acknowledgments</i>	xv
<i>Transcriptions and Phonetics</i>	xvii
<i>Maps and Charts</i>	xxi
INTRODUCTION	1
The previous volumes and their reception	1
“Classics has been misunderstood”	4
Anathema from a G.O.M.	6
Outline of Volume 3	10
<i>Chapter 1</i> HISTORICAL LINGUISTICS AND THE IMAGE OF ANCIENT GREEK	28
Nineteenth-century romantic linguistics: The tree and the family	28
Saussure and the twentieth-century epigones of nineteenth-century Indo-European studies	36
Ramification or interlacing	37

<i>Chapter 2</i> THE “NOSTRATIC” AND “EUROASIATIC” HYPER- AND SUPER-FAMILIES	39
Nostratic and Eurasiatic	40
Archaeological evidence for the origin of Nostratic and Euroasiatic	48
Gordon Childe and Colin Renfrew	53
Language and genetics	56
Conclusion	57
<i>Chapter 3</i> AFROASIATIC, EGYPTIAN AND SEMITIC	58
The origins of African languages and the development of agriculture in Africa	58
The origins and spread of Afroasiatic	60
Conclusion	88
<i>Chapter 4</i> THE ORIGINS OF INDO-HITTITE AND INDO- EUROPEAN AND THEIR CONTACTS WITH OTHER LANGUAGES	90
The origins and diffusion of Indo-Hittite and Indo-European	90
Loans from other languages into PIH	98
Development of an Indo-European gender system based on sex	108
Conclusion	115
<i>Chapter 5</i> THE GREEK LANGUAGE IN THE MEDITERRANEAN CONTEXT: PART 1, PHONOLOGY	116
Greek: Result of a linguistic shift or of language contact?	116
The elements of the Greek linguistic amalgam	121

The phonologies of Indo-Hittite and Indo-European	122
Phonological developments from PIE to Greek	126
Conclusion	154
<i>Chapter 6</i> THE GREEK LANGUAGE IN THE MEDITERRANEAN CONTEXT: PART 2, MORPHOLOGICAL AND SYNTACTICAL DEVELOPMENTS	155
Morphology	155
Syntax	157
Summary on syntactical changes	163
Conclusion	164
<i>Chapter 7</i> THE GREEK LANGUAGE IN THE MEDITERRANEAN CONTEXT: PART 3, LEXICON	165
Introduction	165
The study of lexical borrowings	165
Ancient Greeks' sense of lexical borrowing	175
Loans from Afroasiatic into Greek and into Albanian or Armenian	178
Conclusion	185
<i>Chapter 8</i> PHONETIC DEVELOPMENTS IN EGYPTIAN, WEST SEMITIC AND GREEK OVER THE LAST THREE MILLENNIA BCE, AS REFLECTED IN LEXICAL BORROWINGS	187
Introduction	187
Semitic	189
Egyptian	192
Conclusion	207

<i>Chapter 9</i>	GREEK BORROWINGS FROM EGYPTIAN PREFIXES, INCLUDING THE DEFINITE ARTICLES	209
	Introduction	209
	Greek Borrowings from Egyptian definite article prefixes	210
	The Egyptian word <i>pr</i> “house, temple, palace”	231
	R- “entry” or local prefix	240
	(R)dit, “causal prefix”	241
	Greek borrowings from Egyptian verbs beginning with di(t)-	242
	Conclusion	244
<i>Chapter 10</i>	MAJOR EGYPTIAN TERMS IN GREEK: PART 1	245
	1. N _{tr} /K3	245
	2. ‘nh	258
	3. M(w)dw, μῦθος	262
	4. Sb3	262
	5. <u>Dr</u> , R- <u>dr</u> , <u>drw</u>	267
	6. √Mwr, M3’t, Μοῖρα, Μείρομαι and Mm3’t, Μα	269
	7. Hpr	271
	Conclusion	275
<i>Chapter 11</i>	MAJOR EGYPTIAN TERMS IN GREEK: PART 2	276
	nfr (w)/ms	276
	nfr/ms	278
	Conclusion	298

CONTENTS

xi

<i>Chapter 12</i> SIXTEEN MINOR ROOTS	300
Introduction	300
CONCLUSION	311
<i>Chapter 13</i> SEMITIC SIBILANTS	312
Introduction	312
Loans of sibilants from Canaanite into Greek	313
Lateral fricatives	319
Sheltered /s/ sC /s/ before consonants	322
Conclusion	324
<i>Chapter 14</i> MORE SEMITIC LOANS INTO GREEK	325
Introduction	325
Conclusion	339
<i>Chapter 15</i> SOME EGYPTIAN AND SEMITIC SEMANTIC CLUSTERS IN GREEK	340
Nature and agriculture	341
Cooking	365
Medicine	371
Conclusion	378
<i>Chapter 16</i> SEMANTIC CLUSTERS: WARFARE, HUNTING AND SHIPPING	380
Weapons, warfare and hunting	380
Shipping	399

<i>Chapter 17</i> SEMANTIC CLUSTERS: SOCIETY, POLITICS, LAW AND ABSTRACTION	405
Introduction	405
Society	405
Politics	413
Law and order	416
Abstraction	420
<i>Chapter 18</i> RELIGIOUS TERMINOLOGY	425
Structures	425
Personnel	430
Cult objects	433
Rituals	434
Sacrifices	437
Incense, flowers, scents	439
Aura	439
Mysteries	441
Conclusion	451
<i>Chapter 19</i> DIVINE NAMES: GODS, MYTHICAL CREATURES, HEROES	453
Introduction: Gods	453
Ἡπρ, “become” Ἡπρρ, Apollo, Asklēpios, Python and Delphi	454
Apollo the “Aryan”	454
Was Apollo a sun god before the fifth century?	456

CONTENTS

xiii

Twins, Apollo and Artemis	464
Other Olympians	477
Zeus Nsw	478
Other gods	479
Herodotos' non-Egyptian divine names	480
Demigods	481
Mythical creatures	482
Some heroes	483
Conclusion	484
<i>Chapter 20</i> GEOGRAPHICAL FEATURES AND PLACE-NAMES	485
Introduction	485
Natural features	487
City names	503
Conclusion	511
<i>Chapter 21</i> SPARTA	512
Introduction	512
Sparta: *sper and Sp3t	513
Anubis, Hermes and Sparta	516
“Late” borrowings and Lykurgos	529
Lakonian terminology Egyptian?	532
Sparta and death	536
Spartans and Jews	537

<i>Chapter 22</i> ATHENA AND ATHENS	540
Introduction	540
Summary of the chapter	541
Armor and equipment	542
Athena and her victims	552
Athens as a colony from Sais?	564
Summary of the cultic evidence	576
Etymology of names	576
Ḥt nṯr (nt) Nt Athēna(ia)	579
Conclusion	582
CONCLUSION	583
<i>Notes</i>	587
<i>Glossary</i>	695
<i>Greek Words and Names with Proposed Afroasiatic Etymologies</i>	713
<i>Letter Correspondences</i>	731
<i>Bibliography</i>	741
<i>Index</i>	797

PREFACE AND ACKNOWLEDGMENTS

I must first of all thank my publishers Rutgers University Press and, in particular, Leslie Michener for their extraordinary patience. This volume was promised in 1987 and expected in the early '90s! My excuses for the elephantine gestation are, first, that I was distracted by the polemics surrounding the first two volumes and by the need I felt to compile *Black Athena Writes Back* and work on its aborted twin *Debating Black Athena*. A more important factor, however, was that I had massively underestimated the work required to enlarge and make my scrappy manuscript for this volume presentable. Above all there has been my congenital laziness.

Among the many others I should like to express my deep gratitude to Mary Jo Powell, who courageously took on the editing of this manuscript. I also want especially to thank Roger Blench and Gary Rendsburg for their stimulus and encouragement and for reading chapters of this book, with which of course they were not in complete agreement. I was helped greatly in the preparation of this volume by James Hoch, Saul Levin and John Pairman Brown. Louisa Bennion greatly assisted me in the considerable enlargement of the bibliography. I am deeply indebted to her as I am to Marilyn Campbell for her patient and charming author handling over the last year. I must also express special thanks to Paddy Culligan and Karen English-Loeb for their preparation of the maps.

The series as a whole would have been impossible without the scholarly

aid and constructive criticism of Nikos Axarlis, Gregory Blue, Stanley Burstein, Eric Cline, Erwin Cook, Molly Myerowitz Levine, Valentin Mudimbe and David Owen. I must also thank the following for their great help and encouragement: Anouar Abdel Malek, Lynne Abel, Garth Alford, Fred Ahl, Michael Astour, George Bass, Jacques Berlinerblau, John Boardman, Anthony Bulloch, Walter Burkert, Paul Cartledge, Chen Yiyi, Noam Chomsky, Cyrus Chotya, Geneva Cobb-Moore, Erwin Cook, Paddy Culligan, Peter Daniels, Robert Drews, Emmanuel Eze, Dan Flory, Kirstin Fudeman, Cyrus Gordon, Friedrich Graf, R. Drew Griffith, David Held, Bertrand Hemmerdinger, Paul Hoch, Gayle Holst-Warhaft, Molly Ierulli, Ephraim Isaac, Susan James, Jay Jasanoff, Shomarka Keita, Isaac Kramnick, Peter Kuniholm, Saul Levin, David Levy, Hugh Lloyd-Jones, Anthony Löwstedt, Beatrice Lumpkin, Fuad Makki, Uday Mehta, Henry Mendell, David Chioni Moore, Toni Morrison, Joseph Needham, Maryanne Newton, John Papademos, Jacke Phillips, Paul Powell, Jamil Ragep, Andrew Rammage, Nancy Rammage, John Ray, Colin Renfrew, Lori Repetti, Carl Sagan, Edward Said, Stephen Scully, Reynolds Smith, Anthony Snodgrass, Barry Strauss, Karen Swann, Wim van Binsbergen, Frans van Coetsem, Emily Vermeule, Vance Watrous, and Linda Waugh. Sadly, but inevitably, given the length of time I have taken to complete this book, a number of these scholars are now dead.

My involvement, not to say obsession, with the *Black Athena* project over the past 30 years has not always made me a responsive or responsible family member. Therefore, I want to thank all my family for their patience and love: my sons, Paul, Adam and Patrick, my daughter Sophie, her husband Mark and their two children Charlotte and Ben. Then there are my son William, his partner Vanessa and their Katie and Dan. Above all there is my wife Leslie, who for 28 years has given me the intellectual stimulus and emotional support necessary for such a long undertaking.

TRANSCRIPTIONS AND PHONETICS

RECONSTRUCTIONS

The reconstructions of Nostratic, Afroasiatic, and Indo-Hittite follow those of the scholars upon whose work the relevant chapters are largely based. These are Allan Bomhard and John C. Kerns for Nostratic; Vladimir E. Orel and Olga V. Stolbova for Afroasiatic; and Thomas V. Gamkrelidze and Vjačeslav V. Ivanov for Indo-Hittite. Their reconstructions are similar but not identical. All use an apostrophe after stops *p'*, *t'*, *k'* to indicate emphatic, sometimes glottalic consonants. Their precise nature is unclear but they are neither voiced nor unvoiced. When quoting Bomhard and Kerns and Gamkrelidze and Ivanov, I use a capital *H* to signal a “laryngeal” of uncertain precise quality, as they have been lost in all branches of Indo-Hittite (except Anatolian). *H* is not necessary for describing the super-family of Proto-Afroasiatic because distinct “laryngeals” *>*, *ʕ*, *h*, *ḥ* and *ḫ* have been preserved in several of its families. The diacritic ^[h] after a stop indicates a phonetic not phonemic, or meaningful alternation.

EGYPTIAN

The orthography used in Egyptian words is the standard one used by Anglo-American Egyptologists and in previous volumes of this series,

the only exception being that the sign traditionally transcribed as *k* is written *q* in this volume.

Whatever the exact sound of the 3 in Old and Middle Egyptian (3400–1600 BCE), it was used where Semitic names contained *r*, *l*, or even *n*. This consonantal value was retained until the beginning of the New Kingdom. In Late Egyptian (spoken, 1600–700 BCE), it appears to have become an >aleph and later, like the Southern English *r*, it merely modified adjacent vowels. The Egyptian *i* corresponded to the Semitic >aleph and *yōd*. >Aleph is found in many languages and in nearly all Afroasiatic ones. It is a glottal stop before vowels, as in the Cockney “bo>l” and “bu>ə” (bottle and butter). The Egyptian ‘ayin, which occurs in most Semitic languages, is a voiced or spoken >aleph. The Egyptian form seems to have been associated with the back vowels *o* and *u*.

In early Egyptian, the sign *w*, written as a quail chick, may have originally had purely consonantal value. In Late Egyptian, the stage of the Egyptian spoken language that had most impact on Greek, it seems to have been frequently pronounced as a vowel, either *o* or *u*. The Egyptian sign transcribed as *r* was more usually rendered as *l* in Semitic and Greek. In later Egyptian, as with the 3, it weakened to become a mere modifier of vowels.

The Egyptian and Semitic *h* was pronounced as an emphatic *h*. It appears that the sign conventionally transcribed in Egyptian as *h* was originally a voiced *ḡ*. In Middle and Late Egyptian, it was devoiced to become something approximating the Scottish *ch* in “loch.” The sign transcribed as *h* was pronounced as *hy*. In Middle and Late Egyptian, it was frequently confused with *š*. *š* used to transcribe a sign that originally sounded something like *h*. It later was pronounced as *sh* or *skh*.

As mentioned above, *q* represents an emphatic *k*.

The letter *t* was probably originally pronounced as *tʰ*. Even in Middle Egyptian it was already being confused with *t*. Similarly, *d* was frequently alternated with *d*. In Late Egyptian, voiced and unvoiced stops tended to merge. Thus, there was confusion among *t*, *t*, *d*, and *d*.

Egyptian names

Egyptian divine names are vocalized according to the most common Greek transcriptions, for example, Amon for >Imn and Isis for St.

Royal names generally follow A. H. Gardiner’s (1961) version of the Greek names for well-known pharaohs, for instance, *Rameses*.

Coptic

Most of the letters in the Coptic alphabet come from Greek and the same transcriptions are used. Six other letters derived from Demotic are transcribed as follows:

ϣ	š	ϣ	h	ϣ	j
ϣ	f	ϣ	h	ϣ	č

Semitic

The Semitic consonants are transcribed relatively conventionally. Several of the complications have been mentioned above in connection with Egypt. Apart from these, one encounters the following.

In Canaanite, the sound *h* merged with *h*. Transcriptions here sometimes reflect an etymological *h* rather than the later *h*. *ṭ* is an emphatic *t*. The Arabic letter *thā'* usually transcribed as *th* is written here as *ṭ'*. The same is true of the *dhāl*, which is written here as *d'*. The letter found in Ugaritic that corresponds to the Arabic *ghain* is transcribed as *ǧ*.

The West Semitic *tsade* was almost certainly pronounced *ts* and the letter *śin* originally seems to have been a lateral fricative similar to the Welsh *ll*. In transcriptions of Hebrew from the First Millennium BCE the letter *śin* is rendered *š*. Elsewhere, it is transcribed simply as *s* because I question the antiquity and range of the pronunciation *š*.

Neither the *dagesh nor begadkephat* are indicated in the transcription. This is for reasons of simplicity as well as because of doubts about their range and occurrence in antiquity.

Vocalization

The Masoretic vocalization of the Bible, completed in the ninth and tenth centuries CE but reflecting much older pronunciation, is transcribed as follows:

Name of sign	Plain	with ׀ y	with ׀ w	with ׀ h
<i>Pataḥ</i>	בּ ba	—	—	— —
<i>Qāmeṣ</i>	בֶּ bā	בֵּ bā	—	הּ בֶּ bāh
<i>Ḥîreq</i>	בִּ bi	בִּ bî	—	— —
<i>Šērê</i>	בֶּ bē	בֶּ bē	—	הּ בֶּ bēh

<i>Sgōl</i>	ב be	בֵּ bē	—	בֶּ beh
<i>Hōlem</i>	ב bō	— —	בֹ bō	בֹּ bōh
<i>Qibûs</i>	ב bu	— —	בֻ bū	— —

The reduced vowels are rendered:

ב b^e בֵּ hă בֶּ hě בֹ hǒ.

Accentuation and cantillation are not normally marked.

GREEK

With some hesitation I have privileged the Greek alphabet over the Hebrew (Aramaic) and Egyptian hieroglyphs by retaining it whenever a new term is introduced, while transliterating all other scripts. The reason for this is that Egyptologists and Semitists as well as many lay users of the Roman alphabet find the Greek alphabet easy to read. By contrast, relatively few classicists can read Hebrew and virtually none, hieroglyphics. Determinatives are included when they can provide information not available from the transcription.

The transcriptions of the consonants is orthodox. The same is true of the vowels η and ω, which are written as /ē/ and /ō/. Long ᾱ is rendered /ā/. Υ is conventionally transcribed as /y/ despite the fact that nearly all the borrowings mentioned in these volumes took place before υ /u/ was fronted to become /ü/. Some Semitic loans into Greek may be later as the same shift took place in Phoenician. Nevertheless, the most regular correspondences with the Greek υ were with earlier Semitic and Hebrew /u/ or Egyptian /w/.

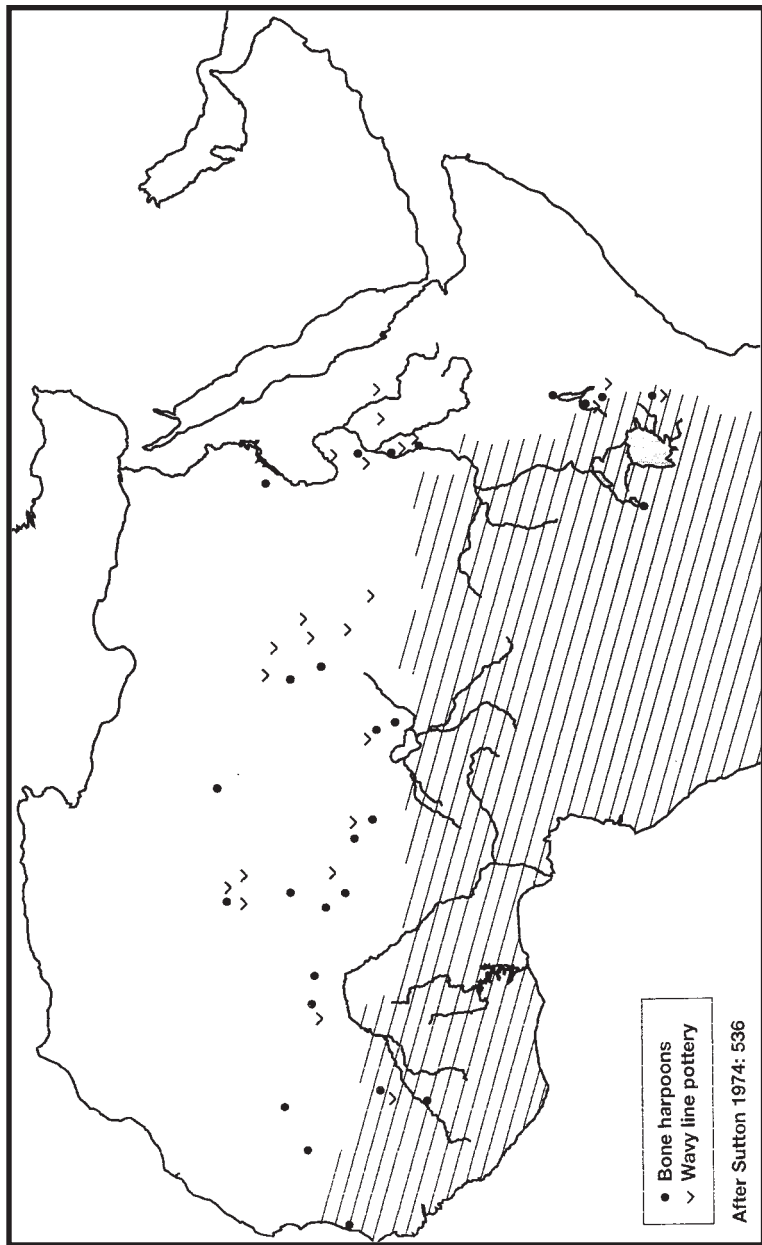
MAPS AND CHARTS

MAPS

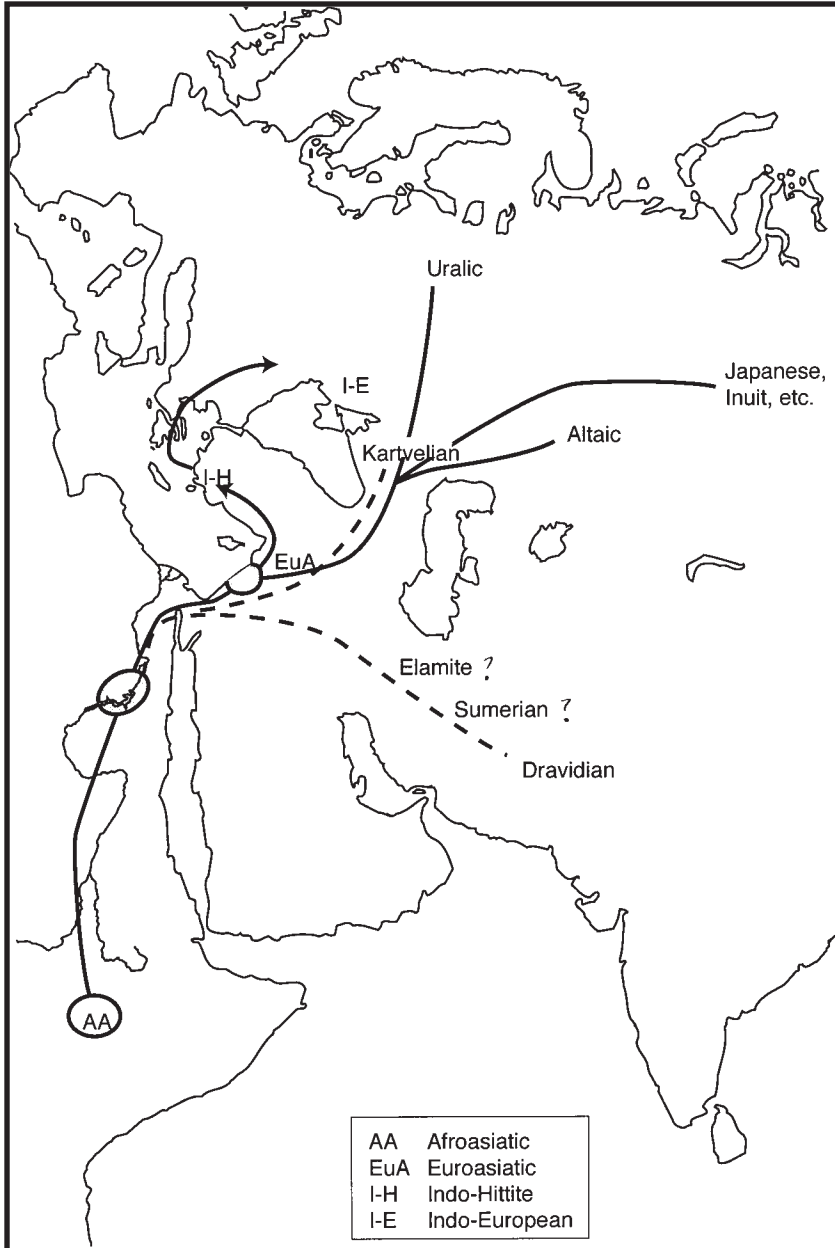
1. Distribution of uniserial harpoons and wavy line pottery
2. Diffusion of Nostratic
3. Diffusion of Afroasiatic
 - 3a. From Asia, Militarev and Schnirelman
 - 3b. From Africa, Diakonoff
 - 3c. ———, Orel and Stolbova.
 - 3d. ———, Ehret.
 - 3e. ———, Blench
 - 3f. ———, Bender
 - 3g. ———, Bernal, 1980
 - 3h. ———, Bernal, 2004
4. Diffusion of Indo-European
5. Ancient East Mediterranean
6. Southern Greece
7. Boiotia.

CHARTS

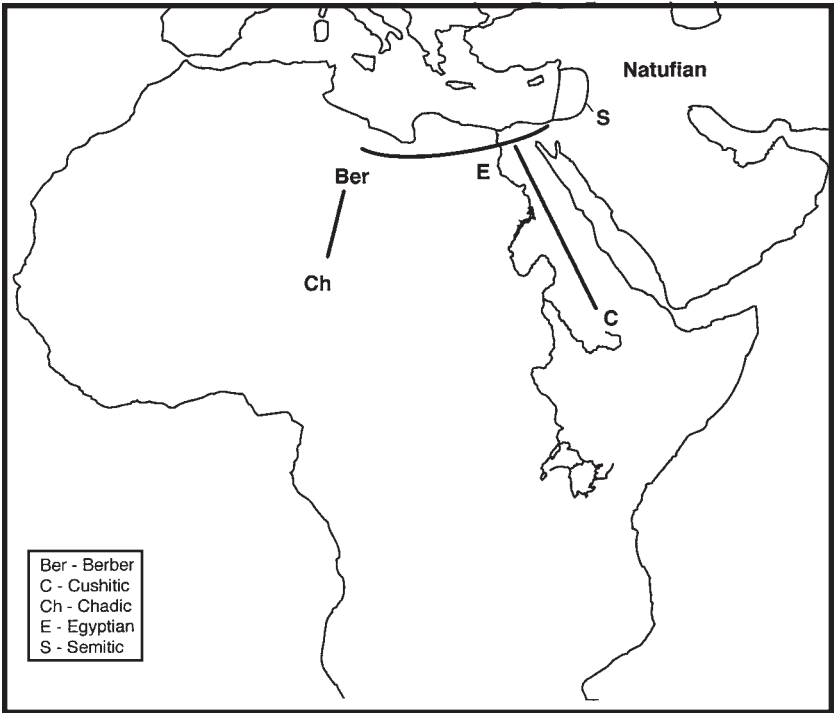
1. Indo-Hittite Language Family
2. Egyptian Chronology
3. Aegean Chronology
4. Greek Chronology



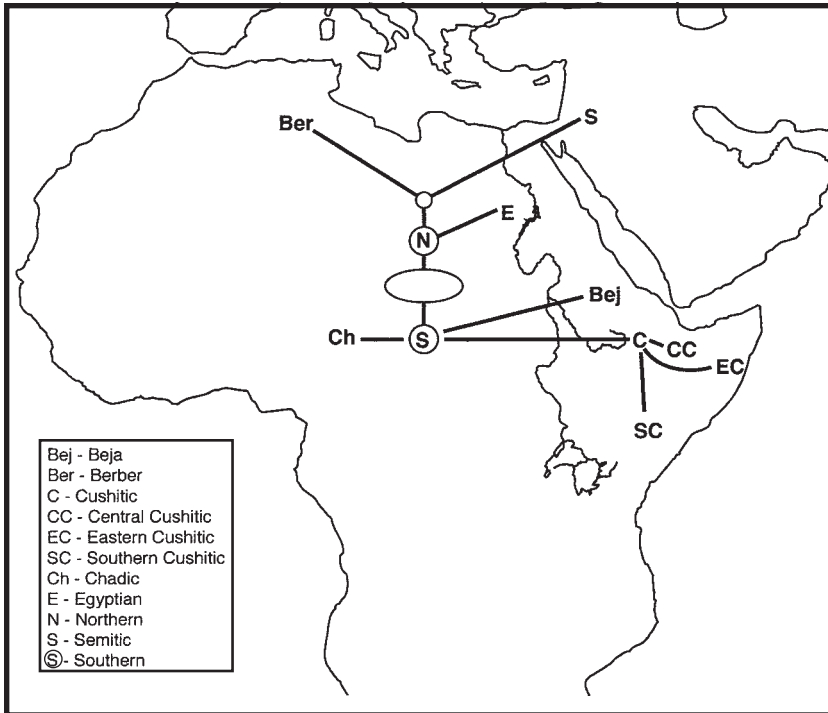
MAP 1
Distribution of Uniserial Harpoons and Wavy Line Pottery



MAP 2
Diffusion of Nostratic

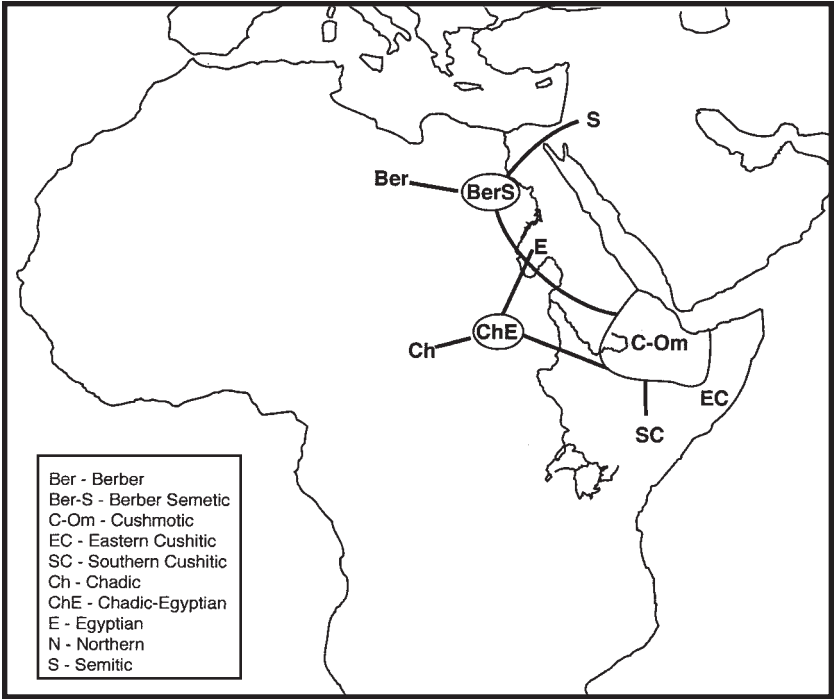


MAP 3a
Diffusion of Afroasiatic: From Asia, Militarev and Schnirelman

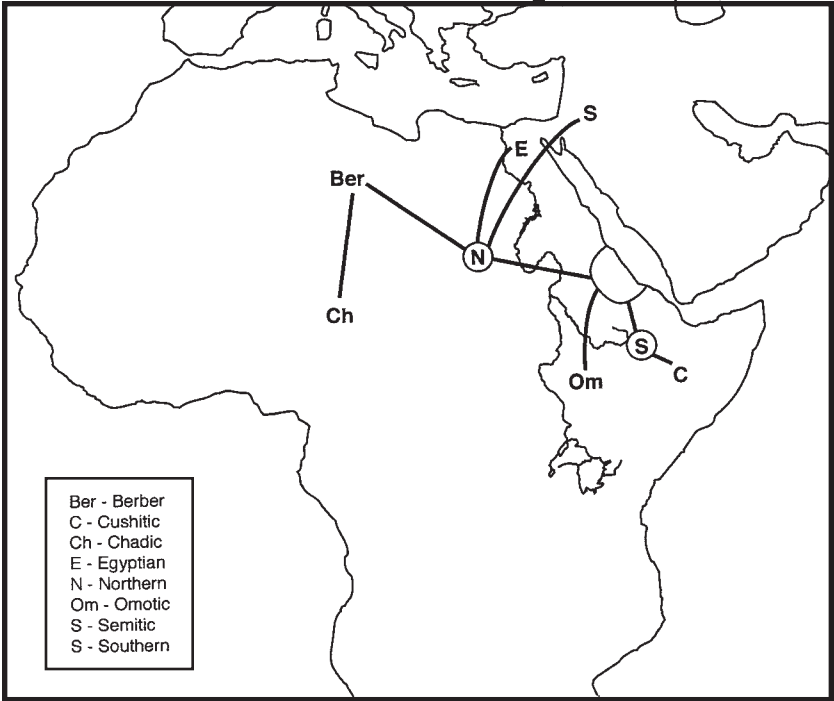


MAP 3b

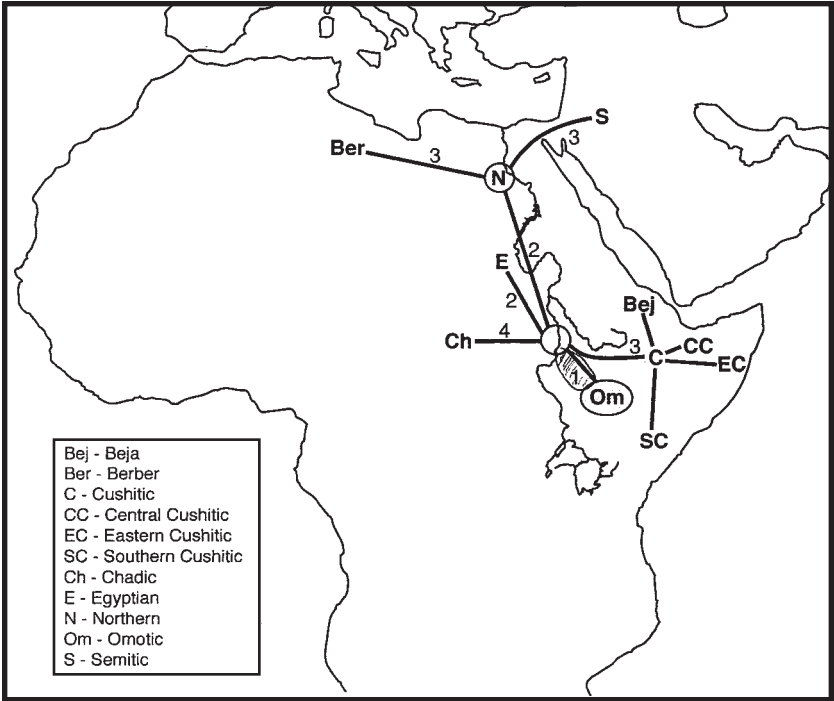
Diffusion of Afroasiatic: From Africa, Diakonoff



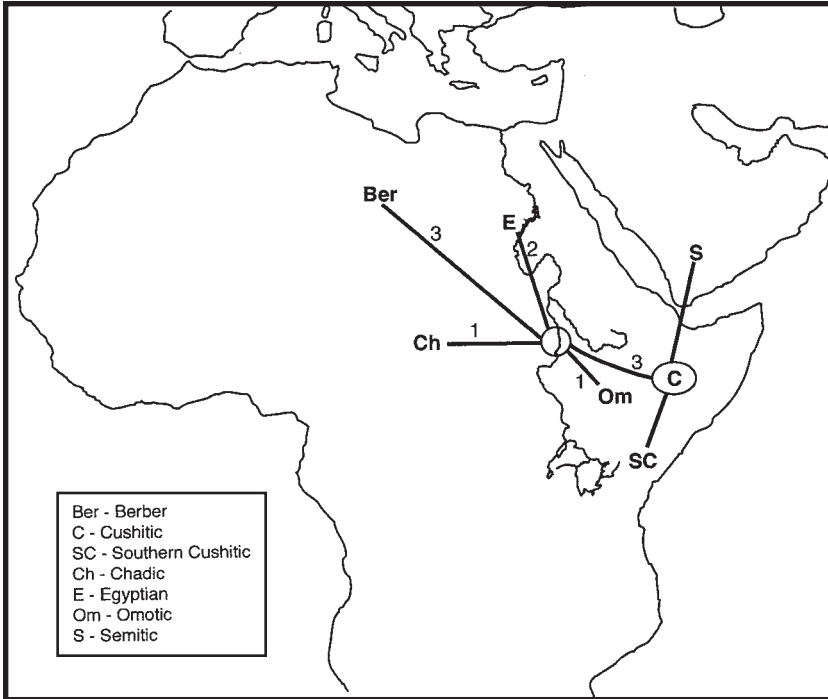
MAP 3c
Diffusion of Afroasiatic: From Africa, Orel and Stolbova



MAP 3d
Diffusion of Afroasiatic: From Africa, Ehret

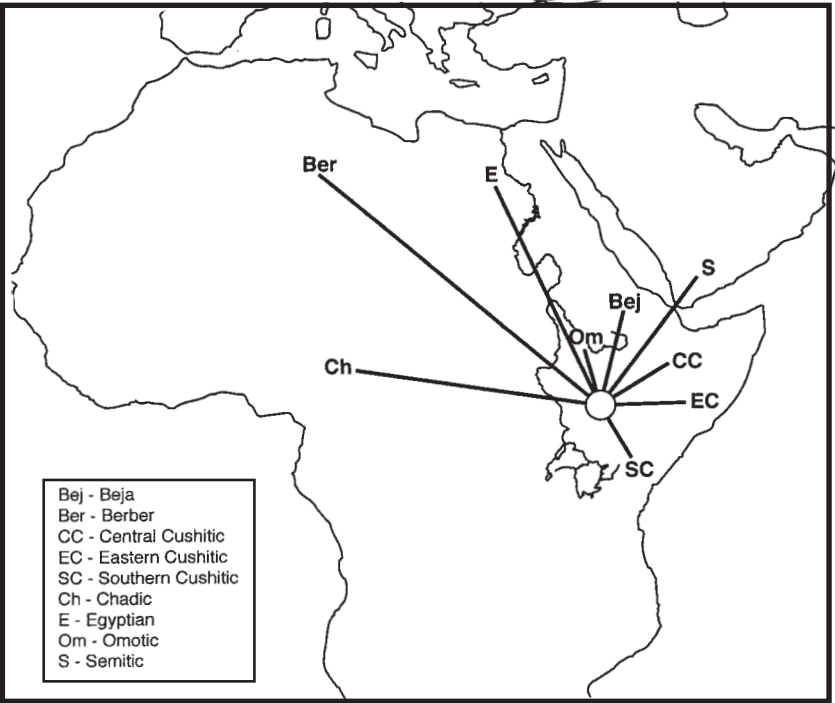


MAP 3e
Diffusion of Afroasiatic: From Africa, Blench

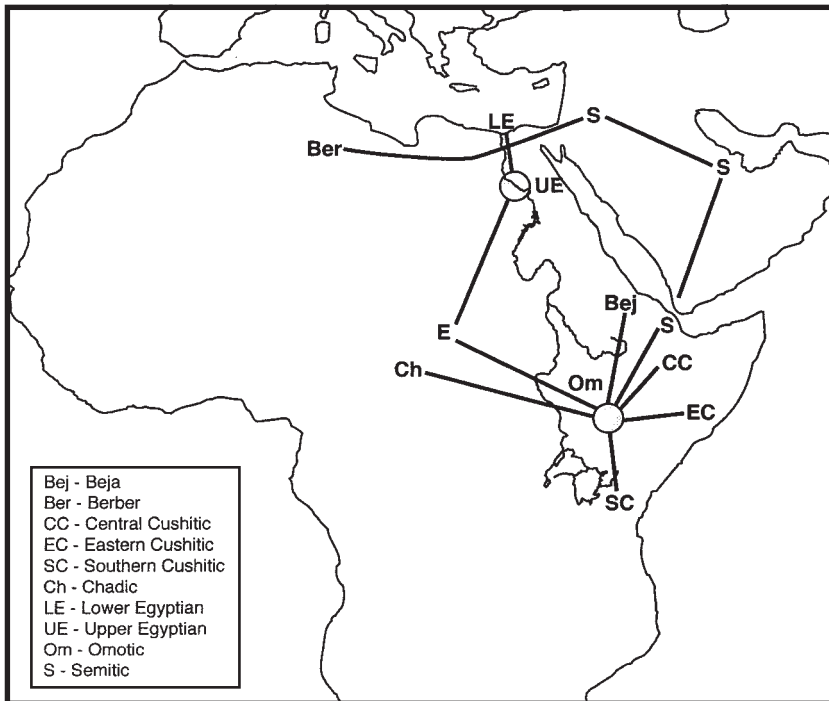


MAP 3f

Diffusion of Afroasiatic: From Africa, Bender

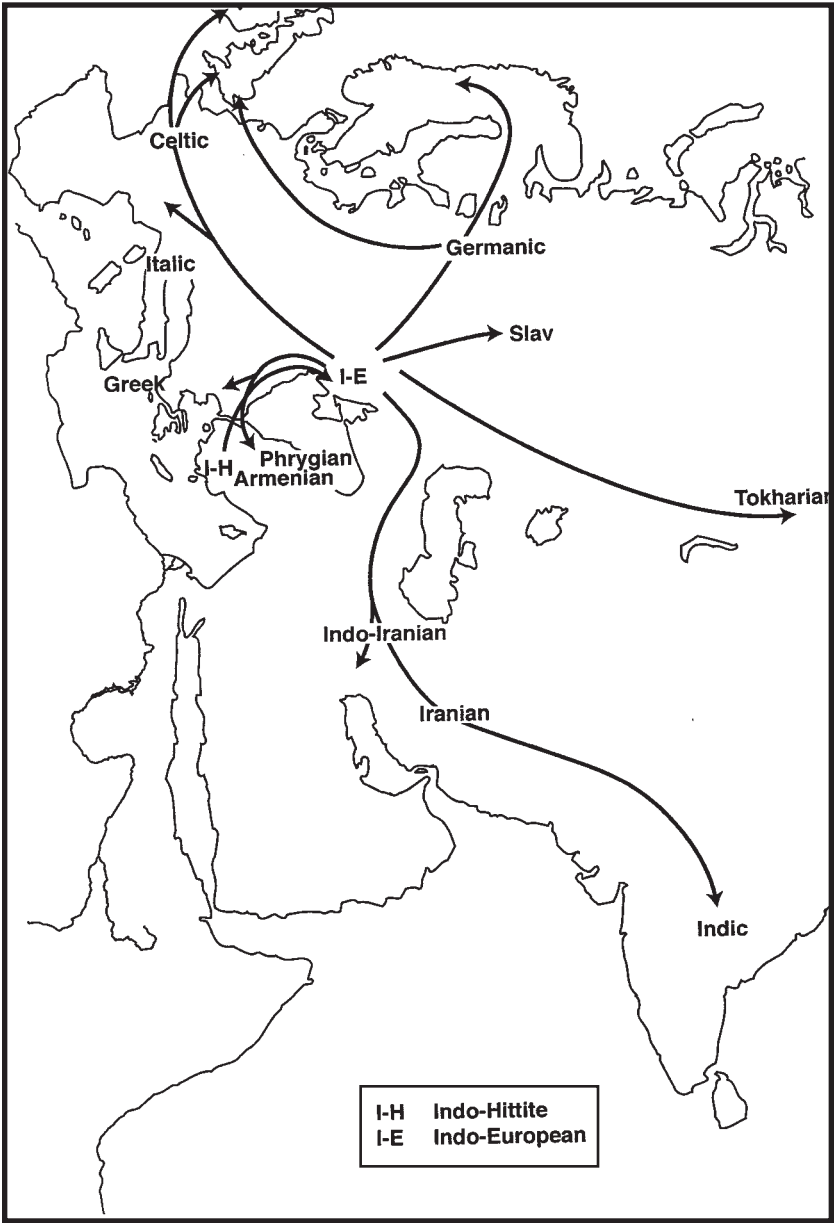


MAP 3g
Diffusion of Afroasiatic: From Africa, Bernal, 1980

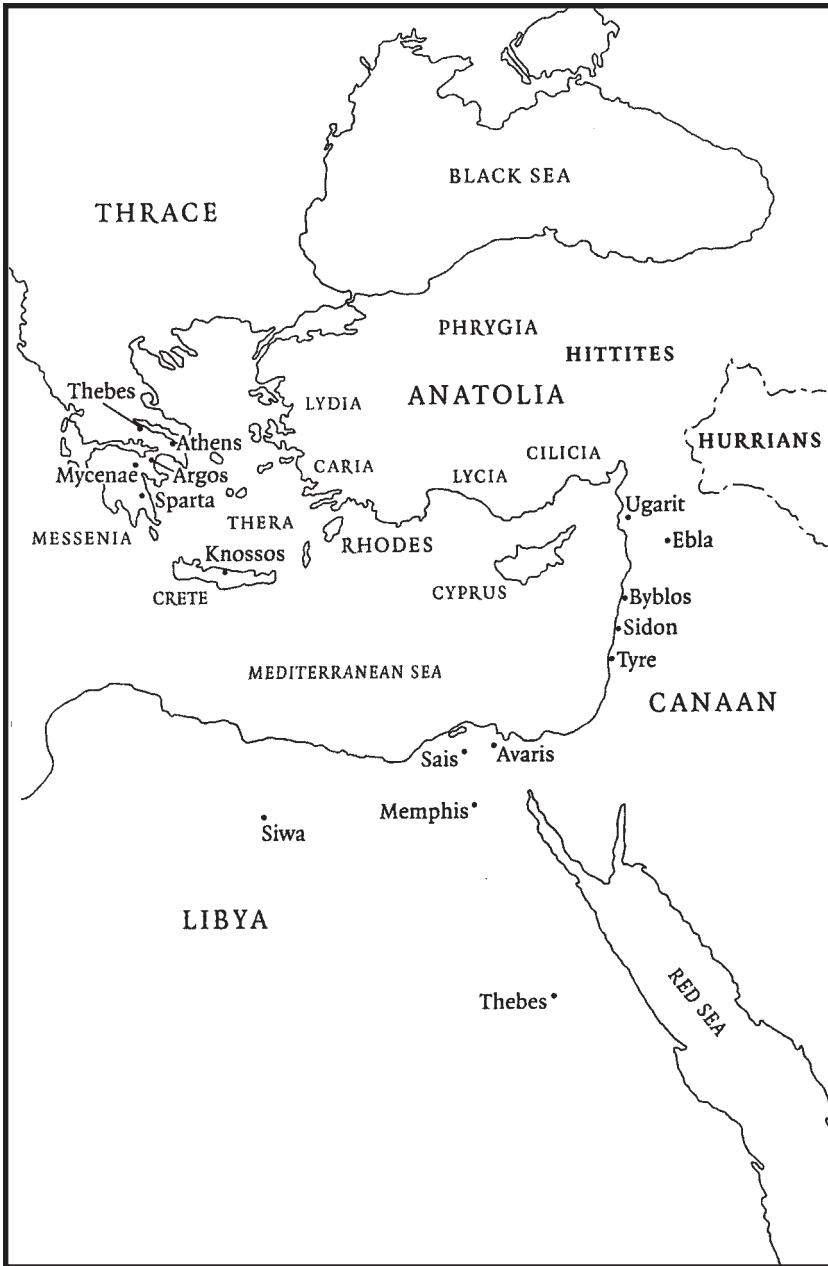


MAP 3h

Diffusion of Afroasiatic: From Africa, Bernal, 2004



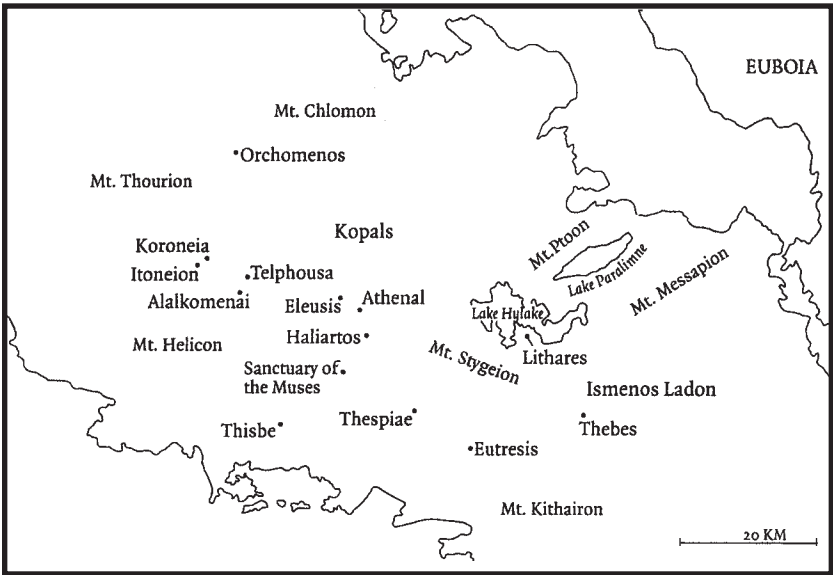
MAP 4
The Diffusion of Indo-European



MAP 5
Ancient East Mediterranean



MAP 6
Southern Greece



MAP 7
Boiotia

CHART I **Indo-Hittite Language Family**

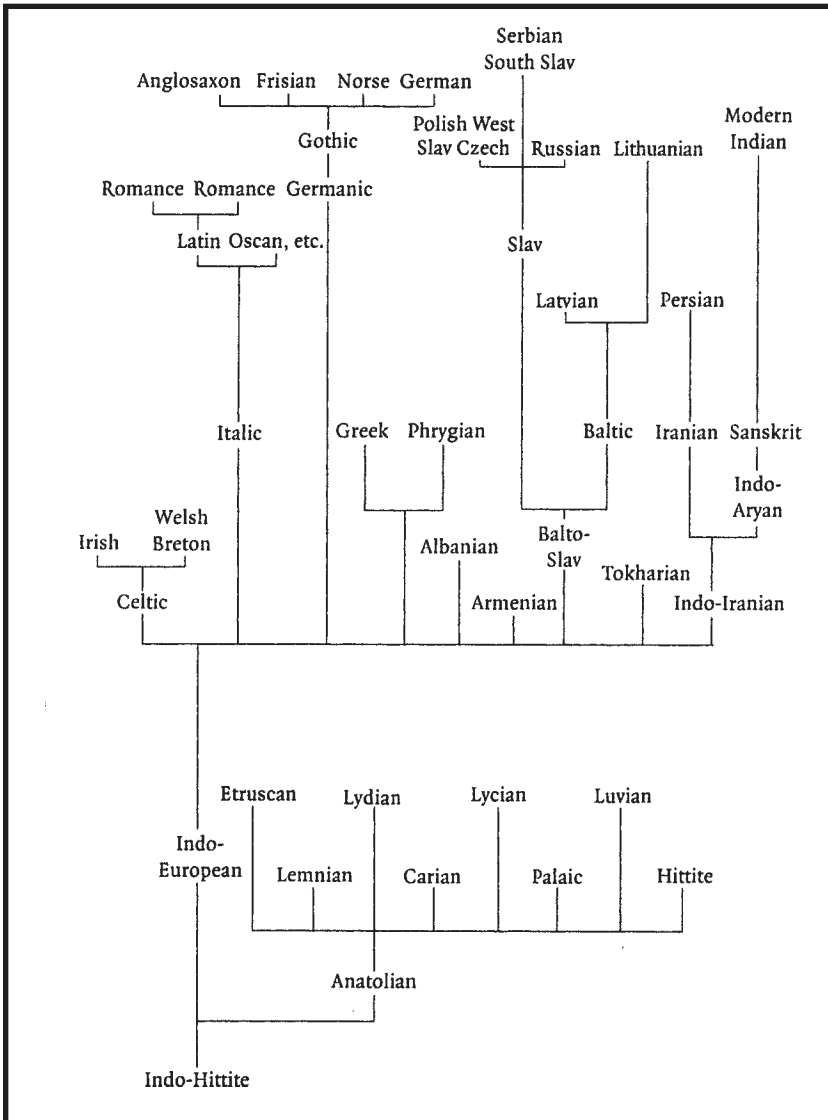


CHART 2
Egyptian Chronology

<i>Dynasty</i>	<i>Breasted</i>	<i>Meyer</i>	<i>CAH</i>	<i>Helck</i>	<i>Mellart</i>	<i>Bernal</i>
1st	3400	3315±100	3100	2955	3400	3400
2nd			2900	2780	3200	3200
3rd	2980	2895±100	2730	2635	2950	3000
4th	2900	2840±100	2613	2570	2850	2920
5th	2750	2680±100	2494	2450	2725	2800
6th	2625	2540±100	2345	2290	2570	2630
7th	2475	—	2181	2155	2388	2470
8th	2475	—	—	—	2388	2470
9th	2445	2360±100	2160	—	—	2440
10th	—	—	2130	—	—	—
11th	2160	2160	2133	2134	2287	2140
12th	2000	2000/1997	1991	1991	2155	1979
13th	1788	1778	1786	?	1946	1801
14th	—	—	—	—	—	—
15th	—	—	1674	1655	1791	1750
16th	—	—	1684	—	—	—
17th	—	—	—	—	—	—
18th	1580	1580/75	1567	1552	1567	1567
19th	1315	1320	1320	1306	1320	1320
20th	1200	1200	1200	1196/86	1200	1200

Sources: Breasted (1906, I, pp. 40–5); Meyer (1970b, pp. 68 and 178); *Cambridge Ancient History* (charts at the end of vols I.2B, II.1 and II.2); Helck (1971, chart; 1979, pp. 146–8); Mellaart (1979, pp. 9 and 19).

CHART 3

Aegean Chronology

<i>Ceramic Period</i>	<i>CAH</i>	<i>K & M</i>	<i>Bet.</i>	<i>Bernal 1</i>	<i>Bernal 2</i>
EMI	3000?				3300
EMII	2500?				3000
EMIII	2200				2400
MMIA	1900				2050
MMIB		2000			1950
MMII	1800				1820
MMIII	1700	1775–50		1730	1730
LMIA	1600	1675–50		1650	1675
LHI	1550				
LMIB/LHIIA	1500	1600–1575	1610	1550	1600
LMII	1450	1500–1475	1550	1450	1520
LHIIB	1430	1550			1520
LHIIIA1	1400		1490		1470
LMIIIA	1380		1490		1470
LMIIIA2/ LHIIIA2			1430–10		1410
LMIIIB/ LHIIIB	1275	1375–50	1365		1370
LMIIIC/ LHIIIC	1180		1200		1220

CAH = *Cambridge Ancient History*, 3rd edition.

K & M = Kemp and Merrillees (1980) *Minoan Pottery in Second Millennium Egypt*.

Bet. = Betancourt (1989) 'High chronology and low chronology: Thera archaeological evidence.'

Bernal 1 = *Black Athena*, Volume 1.

Bernal 2 = *Black Athena*, Volume 2.

CHART 4
Greek Chronology

Destruction of Thebes 1230–1225 BCE
Trojan War 1215–1205
Dorian and other invasions 1150–1120
“Dark Ages”
Hesiod and Homer 1050–850
Geometric Ceramic period 900–750
Orientalizing period 750–650
Archaic period 776–500
Classical period 500–320
Alexander and Hellenistic period 320–100
Roman 100 BCE–300 CE

BLACK ATHENA

INTRODUCTION

Mixture is the ultimate engine of growth in society.
(Laurence Angel, 1971)

THE PREVIOUS VOLUMES AND THEIR RECEPTION

In 1879 the pioneer anthropologist E. B. Tylor published his famous article comparing the Mexican game patolli with the Indian board game pachisi. He argued that the two were not independent inventions but the result of diffusion from one to the other.¹ He based his case on the great number of similarities between the two games. As he wrote in a later article: “The probability of contact increases in ratio to the *number of arbitrary* similar elements in any two trait-complexes”² [my italics]. Volume 3 of this project is based on this principle. It is concerned with language, different aspects of which are more or less arbitrary. Phonology is ultimately limited by the mouth and tongue. Therefore, to link two items convincingly they must share multiple phonetic similarities either within the word or in its context. Morphology, syntax and lexicon, however, are inherently arbitrary, though most languages have more onomatopoeia and phonesthemics than Ferdinand de Saussure supposed, when he declared the absolute distinction between signifier and signified. In any event, words are not fish-hooks. Phonetic and semantic similarities between items in different languages should be taken much more seriously than similarities among fishing gear.

Language is the most controversial aspect of the *Black Athena* project.

Many reviewers of the first two volumes have taken the position that the historiography was more or less all right, the archaeology was dubious and the language was crazy. This is a thoroughly liberal or broad-minded response: “on the one hand, on the other and in the middle. . . .” After the publication of Volume 2, *The Archaeological Evidence*, the reaction to this aspect of the work became more nuanced. Reviewers generally disliked my “methodology” or rather of what they saw as my lack of method. On the other hand, there was a reluctance to challenge my conclusions especially those concerning the closeness of relations around the East Mediterranean during the Bronze Age, 3000–1000 BCE. The generally hostile anonymous reviewer in the archaeological journal *Antiquity* put his or her finger on this sense of unease: “Bernal has the alarming habit of being right for the wrong reasons.”³

It seems to me that if “being right” is not merely the result of a fluke but has become habitual then one should question why the conventional “reasons” could have led to the wrong conclusions. I believe that the answer is quite simple. Where I have merely aimed at “competitive plausibility” conventional scholars in these fields have required “proof.” Specifically they have tended toward minimalism in both time and space. This tendency leads to an acceptance of the argument from silence. On questions of time they assume that a phenomenon was not present until shortly before it is first attested. Spatially, they have given the privileged position to isolation and required *proof* of contact between different cultures and societies. The ideological reasons for this latter requirement as it affected the East Mediterranean were considered at length in Volume 1 of *Black Athena*. Essentially, they were to preserve a pure, and purely European, image of Ancient Greece.

During the past three decades the historiography of the ancient East Mediterranean has shifted significantly. In the first place, archaeologists have discovered increasing evidence of close contacts between Egypt and the Levant on the one hand and the Aegean on the other: an Egyptian statue base with place names from the Aegean; Egyptian and Levantine styles and representations on the wonderful frescoes uncovered under the volcanic deposits of Thera, which erupted in the seventeenth century BCE.⁴ Others include the Mesopotamian and Syrian seals found at the Greek Thebes; the astoundingly rich and cosmopolitan fourteenth-century shipwreck found off the South Turkish coast near Kaş; the paintings with Egypto-Minoan motifs found at Tel Ed Daba’a,

the capital of the Hyksos, who were Syrian rulers of lower Egypt in the seventeenth century BCE. There are also the newly published pictures of Mycenaean Greeks found in Eighteenth Dynasty Egyptian representations. Lead isotope analysis indicates that some copper and silver found in fourteenth-century Egypt was mined at Laurion in Attica.⁵ Finally, there is a strong possibility that two Egyptian-style pyramids long known in the Argolid in the northeast of the Peloponnese should now be dated to the first half of the Third Millennium BCE, the pyramid age in Egypt. Previously they were thought to be of classical or Hellenistic construction. This revised dating indicates cultural influences from the Nile to the Aegean at this very early period.⁶

Such discoveries have made archaeologists reluctant to dismiss out of hand the hypotheses of profound cross-cultural influences. At the same time as this internalist pressure or academic influence has arisen from within the disciplines, externalist forces of reaction against racism and anti-Semitism have been widespread in academia since the 1960s. These have combined with a growing awareness of the social embeddedness of knowledge and the acceptance that earlier classicists and ancient historians not only operated in racist and anti-Semitic societies but were sometimes pioneers of these unsavory movements.

Thus, in the 1980s some broad-minded scholars, notably Walter Burkert, Martin West and Sarah Morris, published powerful works stressing the importance of Levantine influences on the Aegean and recognizing that a major reason for their previous neglect had been the anti-Semitism of earlier scholars.⁷ These works were conceived in the late 1970s at very much the same time as *Black Athena* and would seem to be the result of the same intellectual atmosphere or *Zeitgeist*. The fact that these scholars were professionals, however, sharply differentiated their works from *Black Athena* both in their nature and in their reception. In time, Burkert and Morris, though not West, tend to limit the “oriental” influence they see in Greece to the Late Archaic period, 750–500 BCE, rather than including the Bronze Age. In space, all three restrict this influence to the Levant and do not include Egypt.⁸

These limitations have eased the reception of their work. The enthusiastic welcome given to these works—Sarah Morris’s book received the annual prize of the American Institute of Archaeology—needs further explanation. This acceptance sharply contrasts to the hostility many classicists have expressed towards *Black Athena* and, earlier, to the works of

Cyrus Gordon, as well as to Michael Astour's thoroughly scholarly volume *Hellenosemitica* that detailed many striking mythological parallels between the Levant and the Aegean.⁹

These works were rejected not merely for their content, but also because they were written by outsiders: Gordon and Astour were very distinguished Semitists. Not only status but also content, however, was important. Although earlier works by classicists, such as those by Martin West's *Early Greek Philosophy and the Orient* or Peter Walcot on Hesiod or Ruth Edwards's *Cadmus the Phoenician*, were not savaged. Rather, these works were not taken seriously by the classical establishment. That is to say, their work had no perceptible influence upon the way classicists carried on their isolationist business as usual.¹⁰

"CLASSICS HAS BEEN MISUNDERSTOOD"

In the 1990s things changed drastically. The opening passage of the presidential address to the American Philological Association in January 1993 shows this change. Ludwig Koenen, the president of this largest and most prestigious body of classicists in the world, addressed his colleagues:

Since the beginning of this century, an increasing number of scholars in our field have studied the influence of Near Eastern cultures upon the Greeks: archaeologists and art historians have articulated the Orientalizing period; new finds cast light even into the Dark Age; the decipherment of linear B has changed our view of Greek prehistory; unearthing many new texts in Greek, Ancient Egyptian and Near Eastern languages has advanced our knowledge of these societies. We can no longer afford to look at early Greece in isolation. What is known to researchers, however, does not always reach the classroom, and the general public is hardly aware that our picture of ancient cultures and, in particular, of early Greek culture, has undergone dynamic changes. The Western tradition, with its hold on education, has tended to stress the uniqueness of Greek culture and literature. . . .¹¹

This sophisticated defense of the discipline of classics refutes charges that it failed to set Ancient Greece in its wider geographical and cultural context. The professionals can now argue that my work and that of all

the Afrocentists are redundant because for many decades they themselves have been completely open to the idea of foreign influences on Ancient Greece. What is more, they can view our work as pernicious because they see it as “politicizing,” and making polemical, issues that should remain objective and purely academic.¹²

The idea that the Afrocentrists and I introduced politics into this area of ancient history is no longer tenable. Thoughtful observers now generally accept the fact that ideology intensely influenced classics as a discipline *in its formative period* in the early nineteenth century, as I set out in Volume 1 of *Black Athena*.

This present-day acceptance seems to contradict Koenen’s view that, while the professionals knew about the outside influences on Ancient Greece, not they but the educators were reluctant to divulge these facts. This claim but has some truth, at least since the onset of self-consciously reactionary cultural politics after 1980. Before then, however, many general historians, such as H. G. Wells in his *Outline of History* and Will and Ariel Durant in their *Story of Civilization*, were no more misleading about interrelations around the Mediterranean than the classicists. See, for instance, the isolationism in the popularizing works of such professionals in the field as H.D.F. Kitto, Moses Finley or Chester Starr.¹³ Koenen’s claim that the misapprehension came from the professionals’ failure to communicate the results of their research is seriously misleading. Classicists bear a major share of the blame for perpetuating the nineteenth-century myth of the “Greek Miracle” *ex nihilo*.

Professor Koenen’s reference to the “*increasing* number of scholars” [italics added] during the twentieth century injects a spurious notion of progress. In fact, many archaeologists and ancient historians working at the beginning of the twentieth century, such as Sir Arthur Evans and Eduard Meyer and Gordon Childe, were more open to the idea of Egyptian and Levantine influences on Greece than have been more recent professionals. Colin Renfrew’s early work is only an extreme example of such modern isolationism.¹⁴

The fact that Professor Koenen himself comes from the Cologne school of classicists complicates matters. For some decades this school has been exceptionally open to the idea of Near Eastern influences on Ancient Greece. Strikingly, Walter Burkert and Martin West, whose open-mindedness was mentioned above, have both been in contact with this school. Their teacher Reinhold Merkelbach was a great authority on Greek and Roman mystery cults, an area of classics in which overt

Oriental influences are so overwhelming that they cannot be avoided. Koenen is in the spirit of this school when he emphasizes or focuses on the orientalizing period, 750–650 BCE. Koenen, Merkelbach, West and Burkert all play down the role of Egypt. Nevertheless, all are convinced that it is impossible to understand Greek culture in isolation.

Until recently, the Cologne School's work on oriental influences has been marginalized, even though its members have been impeccably trained. Now, in response to external pressure, their work is being placed at the center of the discipline as evidence of its long-term open-mindedness.

ANATHEMA FROM A G.O.M.

Let me provide an instance of this reaction. Early in 1995 (the last year of his life), Paul O. Kristeller, the grand old man (G.O.M.) of Renaissance history, turned his attention to *Black Athena*.¹⁵ Kristeller was a man of such great age and eminence that, unlike other reviewers, he saw no need to pull his punches. I believe, therefore, that his criticism is particularly significant because he could express openly what many senior classicists feel but prefer not to state in public.

Needless to say, Professor Kristeller did not like my work. He saw it as “full of gross errors of fact and interpretation.” He did not, however, provide any examples, preferring to stick to generalities. “Above all” he was appalled by my “extremely poor” scholarly credentials in classics, since I was a specialist in Chinese. He went on to list six of his own teachers, who were leading scholars of the early twentieth century.

This approach neatly illustrates a point made to me in a personal letter from Noam Chomsky. Chomsky wrote that he was happy to be working at Massachusetts Institute of Technology (MIT) among scientists because—among other things—when faced with a new idea, their first question is “does it work?” Scholars in the humanities, on the other hand, tend to ask “who are you? what are your credentials? who taught you?”¹⁶ I think Chomsky's distinction is overdrawn. Scientists, too, are concerned with credentials and I have been impressed by the number of classicists and ancient historians who have tried to assess the ideas set out in *Black Athena* Volumes 1 and 2 using the criterion of efficacy. Furthermore, it is far more difficult to tell what “works” in the humanities than it is in the natural sciences. Nevertheless, as Kristeller illustrated, Chomsky's distinction is well worth making.

Kristeller's second point was that all his teachers in Germany in the 1920s emphasized the significance of such Oriental influences as Egyptian influences on Greek art, the Phoenician origin of the alphabet and eastern—"more Mesopotamian than Egyptian"—influences on Greek astronomy.¹⁷ He was not convinced by the claims of "later" (Hellenistic-Roman and early Christian) writers on the effect of Egyptian thought on Greek theology and philosophy. Apparently unaware of recent scholarship showing their deep roots in Egyptian religion and their immediate Egyptian precedents, he dismissed the "Greek" *Hermetica* as "forgeries of a much later period."¹⁸

Professor Kristeller's greatest scorn was reserved for my linguistic arguments. He began by slightly exaggerating my position: "Bernal makes much of the claim that of the Greek classical vocabulary, only one third was of Indo-European origin. . . ." In fact, I have always maintained that it is almost 40 percent. He continued, "Yet [Bernal] does not tell us what these sources were." I do repeatedly state that the sources were largely Ancient Egyptian and West Semitic. Similarly, Kristeller asserts "He [Bernal] gives no evidence whatsoever for this statement." In fact, I have provided enough examples for linguists to publish three scholarly articles about them.¹⁹

Kristeller then provided a splendid instance of the "it's not true, and if it were it wouldn't matter" argument. He stated, "I have nowhere found such evidence [of foreign loans] and I am convinced that no such evidence exists. Yet even if this opinion were true it is irrelevant to the problem." Kristeller's reserve or fallback position was simply the assertion, for which he gave no grounds, that "only words with a concrete meaning were generally used" in early Greek. This volume shows how strenuously I contest this claim. Therefore, Kristeller continued, "what matters was the acquiring of new and abstract meanings, which was largely achieved by the use of purely Greek prefixes and suffixes." As I hope to show in this volume, many prefixes, including the prepositions *kata* "down" and *syn-* "with" as well as such suffixes as *-de* "toward," *-then* "from" and *-eus* "the one who," are not Indo-European and may well be Afroasiatic. Nevertheless, most prepositions are certainly of Indo-European origin and I readily concede that many new terms using these prepositions were invented in Greek and that these transformed the language. In the earlier volumes I have already indicated, however, that a number of centrally important abstract words—such as *kudos* "sacred," *sophia* "wisdom," *timē* "honor" and *makarios* "blessed"—have plausible

Afroasiatic etyma and lack Indo-European competitors. I shall propose these etymologies and many others in this volume.

Kristeller went on to give an accurate picture of the attitude of conventional classical philologists of the twentieth century: “The rich modern literature on Greek (and Latin) vocabulary gives no evidence of any external source.”²⁰ Unlike archaeologists and art historians, pure classicists, especially philologists, have always tended to be narrow-minded regarding influences on the Aegean from the south and east. Like Kristeller, they have been uncomfortable with the idea that substantial sectors of Greek religion and philosophy came from Egypt and the Levant. Above all, they want to reject any notion that the Greek language could have been substantially influenced, let alone modified, by Egyptian or Semitic.

Language is central to classics.²¹ As by far the most difficult aspect of the discipline, it is seen as a *sine qua non*, the touchstone of the competent scholar. Language is also central to classics because the discipline was founded in the heat and passion of the early romantic period (1815–1830) when language was seen as the soul or distinctive essence of a people. In many ways this view still prevails.

Romanticism is also acutely concerned with authenticity, seen as purity and frequently associated with the notion of “race.” Thus, the new classicists of the early nineteenth century found intolerable previous beliefs that the Greek language was in any way mixed, let alone influenced by “racially inferior” Egyptians and “Semites.”

In late nineteenth-century China some conservative reformers used the slogan *Zhongxue wei ti Xixue wei yong* “Chinese studies as the essential, western studies as the practice [or technique].” According to this slogan, it was right to import western practices or techniques (*yong*) but it was even more important to preserve the Chinese essence (*ti*).²² In general, nineteenth- and twentieth-century classicists and humanists, have felt a similar urge to preserve what they see as the essential authenticity of the culture to which they are so deeply attached. The more broad-minded are well represented by Professor Kristeller in his willingness to accept that technical borrowings took place. He and they, however, draw the line at the idea that any Near Eastern influence could have affected the “soul” of Greece: its religion, philosophy and, above all, language. The only exception to the last being the admission that Phoenicians introduced “practical” Semitic etymologies for the names of spices and

other trade goods to Greece. A possibility considered appropriate for a “trading people.”

In fact, as the course of modern Chinese history has shown, no neat dichotomy exists between *ti* and *yong*. To the extent that it is useful to postulate such a distinction at all, the *ti* and *yong* are always hopelessly entangled with each other. Furthermore, in his insistence on the fundamental independence of the Greek language Kristeller confuses authenticity with autochthony.

Koenen saw the situation much more clearly when he stated:

we . . . get a better sense of what the Greeks owe to others, and we better comprehend how they used foreign concepts productively, making them building blocks of their own culture. Originality lies rarely in the grand idea, born out of nothing in the brain of a genius; it more often develops from the reworking of a concept received from others.²³

I could not agree more. Until very recently, however, Koenen's view did not represent that of the majority of classicists. Most in his field were, and remain, a deeply emotional attachment to the image of the essential autochthony and purity of Ancient Greece. Only this attachment can explain why scholars have assumed that its two most powerful linguistic neighbors, Ancient Egyptian and West Semitic, should not have massively influenced the Greek language.

This observation takes us back to the three responses to *Black Athena* listed near the beginning of this introduction: that the historiography was more or less all right, the archaeology was dubious and the language was crazy. For classicists and ancient historians, the stakes are relatively low on historiography. Although historiographical conclusions can be uncomfortable, these specialists believe that they can take them or leave them and continue their “practical” or “real” history without being affected by such challenges. Accepting a new archaeological approach is more difficult but the previously isolationist archaeologists can salvage their pride by attacking my lack of method. Language is the old classics' last bastion from which the only possible retreat is the fallback suggested by Kristeller, which he and most traditional philologists are extremely loath to take.

Denial of the possibility of substantial Greek linguistic borrowings from Ancient Egyptian and West Semitic becomes totally unreasonable

when one accepts three propositions: (1) Nineteenth- and twentieth-century philologists were ideologically blinkered against the possibility of substantial linguistic loans from Ancient Egyptian and West Semitic into Greek. (2) A consensus has emerged among contemporary archaeologists that contacts around the East Mediterranean were close during certain periods in the Bronze and Early Iron ages. (3) Over half the Greek vocabulary is inexplicable in terms of Indo-European. Given the geographical proximity, the known contacts and the immense span of time—approximately three thousand years—it would be extraordinary if there had *not* been massive linguistic exchange among the three great cultures and if the predominant flow should not have from the older, richer and more elaborate civilizations of the southeast toward the northwest.

OUTLINE OF VOLUME 3

Given developments in all fields concerned and my general malleability, it is not surprising that this book is different from the one outlined twenty years ago in Volume 1. In the first place, I originally planned for two chapters on documents and archaeology, but they exploded to become Volume 2 with more than 700 pages. Thus, Volume 3 is devoted to language alone. I will now describe its structure.

From the beginning, I was faced with a fundamental organizational problem: Should the book be built on the known and accepted, then proceed from the certain to the probable, and from there to the plausible, ending at the merely speculative? Alternatively, should the structure be chronological? Chronology inevitably involved moving from the unknown, or scarcely known, most ancient periods to the more recent and more easily accessible. I chose a chronological scheme for two reasons: the aesthetic appeal of the narrative through time and the close links between causality and time.

Therefore, before coming to the work's core, the linguistic influences of Ancient Egyptian and West Semitic upon Greek, I look wider and more deeply into the putative language hyper-family "Nostratic" to which all three languages may belong. From there I go on to the accepted super-family Afroasiatic, which includes Egyptian and Semitic and the Indo-European family, including Greek. It should be emphasized from the start that the following sections only form an outline. The chapters themselves contain many issues and much material not included in this summary.

The first chapter is concerned with historical linguistics and ideas

about language contacts. Historical linguistics began with the working out of the Indo-European language family and that family has remained central to the field in two major ways. First, although much work has been done on other language families, Indo-European is explicitly or implicitly taken as the point of reference and model for the reconstruction of proto-languages and the overwhelming majority of reconstructive examples are taken from Indo-European.

The second, more profound, effect of Indo-European studies on historical linguistics is the focus on the genetic model itself. The terms “family” and “genetic relationship” suggest permanence and propriety and the most common image or diagram for a language family took—and still takes—the form of a tree. Historical linguistics betrays its early nineteenth century origins in this preference. Romantics loved, and love, trees because they are both living and stable, rooted in their own soil. Furthermore, although they grow and ramify, they generally do not grow into or mix with other trees but retain a single stem fitting the image of purity. Transhistorical reasons also exist for this preference. In most cultures the oak, ramifying from a single acorn and trunk, is pleasing aesthetically. Compared to other models the tree is easy to comprehend.

Although the philologists have not used it in this way, an actual tree provides a better model if one does not stop at the stem but considers the multiple roots. Some Caribbean writers have tried to convey this concept with the word *rhizome*, the Greek word for “root.” As John Milton wrote, “new presbyter is but old priest writ large,” so one could say that *root* and *rhizome* amount to the same thing. In modern botany, however, *rhizome* is used for “rootstock” and in particular for the tangled web of mangroves, which many Caribbean intellectuals see as a more appropriate image for their culture than that of a large tree with a single stem.

Here we face a good example of the general contradiction between accuracy and coherence. To my mind, a mangrove swamp provides a more accurate model of human cultures, so intermixed with each other, than does an oak. The mangrove, however, lacks the tree’s coherence and explicability. The attempt to describe the complex Caribbean culture in terms of a transplanted African tree has rightly been displaced by a picture of multiple intertwining rhizomes. In other cases, however, the advantages of coherence outweigh those of accuracy and enough overall unity has been imposed on a particular language for it to be conveniently seen as a tree with a trunk, although always with multiple roots. I put Egyptian, West Semitic and Greek in this last category. In

many other cases, however, the permeability of cultures makes the model of the mangrove swamp more appropriate.

Macro-historical linguistics

Scholars who self-consciously want to transcend Indo-European and other recognized language families also use the tree model. Chapter 2 covers this topic. Thus scholars have proposed hyper- or super-families. The most generally accepted and most relevant super-family is Afroasiatic, previously known as Hamito-Semitic or Semito-Hamitic. This huge range of languages includes the following families: Semitic, spoken in Ethiopia and Eritrea as well as in southwest Asia; Chadic, Hausa and other languages around and to the west of Lake Chad; Berber, the original languages of northwest Africa still spoken in its mountains and remote oases; East Cushitic, Somali and related languages; Central Cushitic, the language of parts of Ethiopia; South Cushitic spoken by scattered groups in Kenya; and Omotic, spoken in southwest Ethiopia. Some branches are made up of single languages: Beja, spoken between the Nile and the Red Sea, and Ancient Egyptian. Linguists have discovered enough common features among all these branches to postulate a single, though very ancient, ancestral language. Other linguists have found even larger super-families, such as Niger-Congo stretching from Senegal to Swaziland. Casting their nets even more widely, they have discerned a Nilo-Saharan family scattered across northern Africa with very few common features indeed.

Since the late nineteenth century, attempts to establish genetic links between Indo-European and other language families have appeared sporadically. Their nonacceptance by mainstream Indo-Europeanists is overdetermined. At an ideological level any such connections would infringe on Indo-European purity and at a methodological one the attempts require imprecisions not tolerable to men and women working within the tight elegance of a single language family.

The first attempt linked Semitic and Indo-European. The externalist or ideological reason for this was the belief—common in the mid-nineteenth century—that the Indo-European and Semitic “races” were the only ones that contributed to the progress of humanity. The internalist reasons were the facts that verbal roots in both families were based on triple consonants and that the large number of plausible cognate, or apparently related, words are found in both.

Interest in this connection faded with the rise of anti-Semitism and, especially, after the relationship between Semitic and some purely African languages was established in the Afroasiatic family. Some scholars have continued to envisage the Nostratic hyper-family and see Indo-European and Afroasiatic, as a whole, as related. In the last forty years, however, interest in another hyper-family “Euroasiatic” has increased. Core members of this family include Indo-European; Uralic (Finnish, Hungarian and other northern Eurasian languages); Altaic (Turkish, Mongol etc.); Tungus (Manchu); Korean; and Japanese, Ainu and Inuit. Some scholars also include Kartvelian (Georgian and related languages), Northwest Caucasian (Abkhaz) and Dravidian (Southern India) in this hyper-family. A political motive for setting up this grouping was to establish a language family that encompassed the extraordinarily varied linguistic mosaic in the Soviet Union. It was found that, although these language families shared fewer similar words than did Indo-European and Afroasiatic, the morphology or case systems and verbal patterns of Indo-European, Uralic and Altaic showed striking resemblances not found elsewhere. For many reasons linguists preferred to rely on these, rather than lexical, similarities.

Despite the utility of the tree model in explaining relationships within and beyond language families, this model of development can be especially misleading for historical linguistics. To take one of the best known and most thoroughly studied trees of this kind: many of the features of the Romance languages can be explained as divergences from the vulgar Latin of the Roman Empire. On the other hand, understanding of other aspects of individual languages requires some knowledge of the languages spoken in the various provinces before the arrival of Latin. This understanding is usually extremely difficult to obtain. Even more important, one needs to take into account the linguistic effect on the former Roman provinces of the languages of neighbors or conquerors: Slavs on Romanian; Goths, Arabs and Greeks on Italian; Franks on French; and Arabs and Berbers on Spanish and Portuguese. If this caution is necessary for the recent, massively attested and geographically compact Romance “family,” it is even more important for the majority of language families that are older and more widespread.

Dominated by the origins of their discipline and frightened of the imprecision and uncertainty that come from leaving the tree model, traditional historical linguists have a great distrust of nongenetic linguistic contact. The discipline’s vocabulary shows this distrust. For example,

the term used for the adoption of a word from one language to another is “borrowing.” “Borrowing” and “lending” are—if we are to believe Shakespeare’s platitudinous Polonius—undesirable activities with sordid commercial connotations. They add confusion and “dirt” in its fundamental sense of “misplaced matter.” What is more, loans are meant to be temporary. In fact, of course, loaned *words* cannot be returned and they usually last as long in the “borrowing” language as native terms. To the early nineteenth-century German linguists who first coined the term *Entlehnung* “borrowing” or “loan” such words did appear to be temporary and unnatural. Those linguists tried to transform the German language by replacing words of French or Latin origin with terms constructed from “authentic” Teutonic roots.²⁴

Over the last twenty years, the study of language contacts and mixture has become more fashionable. Approaches have varied but share various features. The most important commonality is the conviction that languages are not autonomous entities but social creations spoken by living populations. Therefore, linguistic contact is a reflection of social contact. A corollary is that, while similarity of language, such as that between English and German, may ease borrowings from one language to another, the social and cultural relations between the two groups of speakers form the determining factor. Thus, for instance, substantial cultural contact over many centuries has led to massive Chinese influence on the Japanese lexicon, even though the two languages are completely unrelated.

In addition, different types of contact affect different aspects of the language. When, for example, speakers of one language abandon their own and take on another they tend to learn new words but retain old habits of pronunciation and grammatical structure. Examples can be found in the pidgins of New Guinea and Melanesia, where the vocabulary is almost entirely derived from English or other colonial languages but the structure and pronunciation are completely local. Similarly, Irish-English contains very few Gaelic words, yet the old language has deeply affected the intonation and syntax of the newer one.

Conversely, the languages of politically, culturally or economically dominant groups tend to affect the lexicons of subordinate societies more than their morphologies or syntaxes. Swahili is full of Arabic words but still has a fully Bantu grammar and morphology. Japanese has retained its elaborate inflection despite the saturation of its vocabulary by words from Chinese, which has a completely different grammatical structure.

Chapter 3 of this volume focuses on Africa. It is concerned with the early development of agriculture on the continent and the relation of this process to Joseph Greenberg's scheme of the four great African language families: Khoisan, Nilo-Saharan, Niger-Congo and Afroasiatic. While Greenberg concentrates on the last, he is also concerned with Afroasiatic lexical contacts with other families.

In Chapter 3 a number of published hypotheses about the region of origin, or *Urheimat*, and subsequent spread of Afroasiatic are set out. These include one that sets the *Urheimat* in the Levant. The majority of scholars place it in North Africa, although many differ over the location. I argue for southern Ethiopia on two principles: the greatest regional diversity of Afroasiatic languages and language families is found here and because I see Afroasiatic as having borrowed the Central Khoisan grammatical structure of sex-linked gender. Thus, at a fundamental level, I see Afroasiatic as "Khoisanized" Nostratic.

This chapter also includes specific discussions of Egyptian and Semitic, the two language families with the closest interactions with Greek. In this consideration of Semitic, I have changed my earlier view that it originated near the territory in southern Ethiopia now inhabited by speakers of the Gurage languages. I now, much more conventionally, place the *Urheimat* of Semitic at the southern end of the Red Sea, on either the African or the Arabian side. I see Semitic speakers as then having spread across what is now the Arabian Desert, but much of which was savanna during the Holocene after the last Ice Age. Entering Mesopotamia from the south, Semitic went on to Syria and the Levant.

Ancient Egyptian gives every indication of being a mixed language. Even allowing for the inability of the scripts in which it was written to express vowels, its morphology was far less elaborate than those of other Afroasiatic language families, notably Semitic. Its syntax was, therefore, proportionately more demanding. Mixture is also indicated by two contrasting features. On the one hand, Egyptian shared with Semitic and Berber a system of triconsonantal roots, which were significantly less frequent in the other Afroasiatic language families. On the other hand, judging from its lexicon, Ancient Egyptian is closest to the Chadic branch of Afroasiatic. After considering other hypotheses of its origin, I propose that the Egyptian language and culture came from two sources: first, from the western Sahara, hence the Chadic parallels, and, second, from Proto-Semitic-Berber, which had spread through southwest Asia and across northern Africa.

Throughout the more than three thousand years of its history, Ancient Egyptian culture was acutely conscious of the duality of Upper (the Nile Valley) and Lower Egypt (the Delta). This division partly resulted from different geographical environments. It may also derive, however, from reflexes of the two linguistic and cultural sources. While both descend from Afroasiatic, they each developed significant grammatical and lexical distinctions.

In Chapter 4, I discuss the origins of both Indo-European and the larger family to which it belongs, Indo-Hittite. This larger family includes both Indo-European, in the narrow sense, and its earliest branch, the Anatolian languages of which Hittite is the best known. The Georgian linguist Thomas V. Gamkrelidze and his colleague the Russian Vjačeslav V. Ivanov place the *Urheimat* of Indo-Hittite in eastern Anatolia, thus explaining Kartvelian or Georgian parallel words in Proto-Indo-Hittite (PIH) and Proto-Indo-European (PIE). For detailed reasons given in Chapter 4, I prefer to follow Colin Renfrew in seeing PIH as associated with the ancient agricultural region of the plain of Konya in central Anatolia, best known for the famous site of Çatal Hüyük.

Gamkrelidze and Ivanov propose a number of loans from other languages notably Kartvelian and Semitic into PIH and PIE, or exchanges between them. I find most of these acceptable as they explain a number of parallels between words widespread in both Indo-European and Afroasiatic that cannot plausibly be attributed to Nostratic. I end Chapter 4 considering the possibility that Indo-European borrowed a pattern of sex-linked gender from Semitic. None of the other Euroasiatic languages have this pattern. For these others, the predominant binary is animate/inanimate. Indo-European retains the latter as the neuter gender, something absent from Afroasiatic, while splitting the animate into male and female. My argument is based on the rare structural parallels and also on the predominant feminine suffix in Indo-European *-ā*, which seems to be found in the early northern Semitic language of Eblaite.

*Afroasiatic languages and the formation
of Greek*

Chapters 5 to 7 have the overall title “The Greek language in the Mediterranean context.” The first of these chapters, on phonology, is largely negative, in that the phonological alterations that took place between

PIE and the earliest Greek can largely be explained as internal developments, without recourse to Afroasiatic influences. Furthermore, where similar changes, such as that from initial *s-* to initial *h-* or the breakdown of labiovelars, took place in both Greek and nearby Afroasiatic languages the Greek shift seems to have been earlier. On the other hand, Afroasiatic clearly influenced the distribution of phonemes in Greek through lexical loans. For instance, the frequency of the uniquely Greek medial *-ss-*, *-tt-* was greatly increased by renditions of the Semitic /š/ plausibly reconstructed as /ts/. The very high number of Greek words beginning with *p-* can be explained by the many borrowings of Egyptian words incorporating the prefixes *pʒ* “the” and *pr* “house.” Even more importantly, a high number of prothetic, or initial, vowels occur in Greek. It is generally agreed that all PIE words began with a consonant. Nevertheless, most Indo-European languages have prothetic vowels either deriving from initial consonantal clusters that were difficult to pronounce or from traces of lost PIE “laryngeals” *H₁, H₂, H₃, etc. probably resembling *h, h_y, ḥ, ḥ, ʿ, γ (not necessarily in that order). The inordinate number of prothetic vowels in Greek can be explained as the result of borrowings from Egyptian and Semitic words beginning with *ʾaleph* or *ʾayin*.

Chapter 6 is concerned with morphology and syntax. As stated above, Greek morphology is undoubtedly fundamentally Indo-European. One or two forms do, however, indicate Afroasiatic influence. Decades ago, Saul Levin demonstrated that the oblique dual endings *-oiin*, *-aiin* derived from the West Semitic dual *-ayim*. From the Egyptian agential suffix *-w* comes the Greek *-eus*; “the one who.”

As for syntax, I argue that a number of the key syntactical terms in Greek, *kai* “and” as well as the crucial, but difficult to define, particles *gar* and *oun* lack Indo-European etymologies but have plausible derivations from Egyptian. Even more important is the definite article, deriving from a reduced demonstrative. This form originated in Upper Egypt around the beginning of the Second Millennium BCE and spread by “calquing” (taking the idea and applying it to native roots) to West Semitic, Greek and, hence, most European languages.

With Chapter 7, I reach the central theme of the book, lexicon. In the conventional view of the formation of the Greek language, which I call the Aryan Model, the language resulted when Indo-European-speaking Hellenes conquered the mysterious Pre-Hellenes, who, though viewed as “racially” European, could not have spoken an Indo-European

language. This last point is needed to explain the large number of Greek words and even larger number of proper nouns without Indo-European etymologies. It has been proposed that these words were the remnants of the pre-Hellenic substrate. This explanation is plausible for place-names, which are often preserved after the advent of a new language. Such influence is less plausible for the vocabulary. The most frequent pattern is for the substrate to affect the phonetics and grammar of the new language rather than to introduce new words into it.

While making some modifications, I accept the conventional view that almost 40 percent of the Greek vocabulary is Indo-European. From this base, I go on to challenge the belief that most of the rest derive from lost “pre-Hellenic” languages. Instead, I claim that a further 40 percent are loans from Ancient Egyptian and West Semitic. The modifications I propose to the Indo-European component of the Greek vocabulary involve Armenian and Latin. If the only Indo-European cognate to a Greek word is found in Armenian or Latin, it should be scrutinized with extreme care. The general belief that Armenian has a special genetic relationship within Indo-European has recently been seriously challenged. It should further be noted that the Armenian language was only first attested in the fifth century CE, when most of the early texts were religious translations, sometimes literally taken from the Greek. Armenian also borrowed from Aramaic and Syriac. Thus, parallels between Greek and Armenian words need not be genetic but can be the result of loans or common borrowings from Semitic.

Latin and Greek come from different branches of Indo-European. The Romans, however, took massively from Greek culture in all respects including vocabulary. It is, at the same time, clear that both Greek and Latin borrowed heavily from Semitic, and, more surprisingly, that Egyptian words also occur in Latin. Thus, similarities between Greek and Latin terms that are not direct loans are not necessarily genetic cognates; they can also be common borrowings from Afroasiatic.

Chapter 8 begins with a discussion of the criteria by which one should assess the plausibility of proposed Greek etymologies from Afroasiatic. On the phonetic side, one should find three parallel consonants in the same order. While the semantic criteria are less precise, they require equal or more attention. Naturally, an Indo-European etymology weakens or destroys the possibility of an Afroasiatic one. This weakness, however, can also depend on the strength of the genetic claim.

In looking for parallels one must consider sound shifts in the three languages. Most of Chapter 8 consists of a survey of phonetic changes in Semitic and Egyptian in the last three millennia BCE and the ways in which at different periods they were interpreted differently by Greeks. As well as providing evidence on the plausibility of borrowing, sound shifts in Semitic and Egyptian can provide information about the date of borrowing. For instance in Semitic, around the middle of the Second Millennium, the phoneme /t/ merged with /š/. Thus the city name *Ṭor* became *Šor* as it still is in Hebrew. In Greek, however, the name remained *Tyros*, *Tyre*. Thus, Greeks must have learned the name before 1500 BCE. At about that time the Canaanite /ḡ/ *ghayin* merged with /ʿ/ *ayin*. In Hebrew, the southern coastal city we know as *Gaza*, is *ʿazzāh*, indicating that the Greeks, from whom we gain the name, knew about it before that shift.

Egyptian sound shifts also resulted in different Greek renditions of the same “letter.” The two most significant of these were 𐤀 conventionally rendered /š/ and 𐤁 /ʒ/ “double aleph.” Judging from Afroasiatic parallels, it is now clear that 𐤀 was originally pronounced /ḥ/ and that it shifted to /š/ sometime in the Third Millennium. Thus, it is interesting to find a number of Greek words beginning with χ - or κ - for which plausible etymologies exist from Egyptian terms with initial š-. Such loans would have to be extremely early, possibly introduced before the arrival of the Hellenes or preserved in Cretan languages. After this shift, Greek lacking the phoneme /š/ sometimes rendered it as /χθ/ and later still as /ξ/ or simply /σ/.

The development of 𐤁 /ʒ/ is equally interesting. From Afroasiatic parallels and Egyptian transcriptions of Semitic names and terms, we know that it was generally pronounced as a liquid /r/ or /l/ into the second half of the Second Millennium. After that, it merely modified vowels, rather as the medial and final “received” British /r/ and /l/ have done: *farm-fām*, *calf-cāf* etc. If the earlier consonantal value is taken into account, a very large number of Greek words without Indo-European etymologies can plausibly be provided from Egyptian.

The last section of Chapter 8 is concerned with what I see as a pattern by which an Egyptian /m/ was rendered /φ/ in Greek. This change did not result from a sound shift. Rather, the semantically controlled examples seem to illustrate the slippage from one to the other, which is common in many languages.

Chapter 9 is primarily concerned with the definite articles masculine *p3*, feminine *t3* and plural *n3 ny*. These articles became so firmly attached to the nouns they modified that they were borrowed together, much as European languages accepted *alchemy*, *alcohol*, *algebra* and *alcove* with the Arabic definite article *>al*, as part of the word. In this chapter, I also discuss the roles of the Egyptian *pr* “house,” and the locative *r-* in Greek borrowings, particularly of place and personal names. Middle Egyptian did not feature definite articles. These articles are in fact the type markers of Late Egyptian; they only became standard throughout Egypt in the second half of the Second Millennium. Late Egyptian, however, is as old as, or older than, Early Greek. Mycenaean Greece was largely contemporaneous with the Egyptian Eighteenth and Nineteenth dynasties. Thus, many examples of definite articles could well have been borrowed into Greek in the Bronze Age. The last section of Chapter 9 contains an annotated list of words taken into Greek from Egyptian and beginning with the causative prefix (*r*)di.

Chapters 10 and 11 are concerned with some terms for central concepts in Egyptian culture, some of which were borrowed into Greek many times. In Chapter 10 these include *ntr*, “growth, divinity” with some compounds *sntr* “to make holy” and **k3 ntr* “holy spirit”; *k3* “spirit” or “double”; *nh*; “life”; *sb3*; “star, astronomy, wisdom”; *dr*; “limit, goal”; *m3 t*, “balance, fate”; and *hpr* “to become, impermanence.”

Chapter 11 is devoted to only two Egyptian terms. The first is *nfr* “beautiful, young,” which with the plural definite article *n3 ny nfrw* provides a good etymology for *Nymphai* “nymphs.” The second is *msi* “birth, child, midwife.” This term is generally acknowledged to be the origin of the Hebrew name Moses but I argue that it is also the source of the Greek Mousai “Muses.” This chapter also contains a study of the parallel iconographical sequence from images of Thueris, the hippopotamus goddess of childbirth, to the Minoan and Mycenaean genii to the Archaic half-wasp, half-nymph and on to Hesiod’s vivid description of the Muses. In these and other examples of Afroasiatic loans, cited below, in which there is an Indo-European competitor, I discuss the latter in the text but not in this introduction.

The title of Chapter 12 is “Minor Roots. . . .” These roots are only “minor” in comparison to those discussed in the previous two chapters. They include some roots that provide central terminology for Greek

society and politics and, hence, those of modern Europe: *isw* “fair reward” the origin of the Greek prefix *iso-* “equal”; *htr* “bind together, yoke,” which leads to both *hetairos* “companion” and *heteros* “other of two,” and *dmi* “town, village” and *dmi w* “fellow citizens” leading to *dēmos* “people.”

Nmi in Middle Egyptian means “to travel.” Interestingly it is often written with the sign of the “winding wall” $\square$, which, whether pronounced as *nm* or *mr*, is associated with cattle. It is also used, for instance, in *nmi* “to low like cattle.” The sign also appears in some writings of *nmiw š* “Bedouin, sand farers.” The association with cattle occurs indiscriminately in words with *nm*, *mr* or *mn*. *Mni* is “to be a herdsman” and *nmiw* were “herdsmen.” This “winding wall” sign associated with cattle, boundaries and nomadism fits well with the basic sense of the Greek verb *nemō* “to allocate cattle lands” and the nouns *nomas-* *nomas-* *nomados* “nomad” and *nomos* “law.”

With Chapter 13 we turn to the Semitic contribution to the Greek vocabulary. The first consideration is of proposed loans from West Semitic into Greek beginning with *s-*. Most words in this category simply render *s-* for *s-*. Complications occur on both sides. First, there is the Greek shift *s->h-*; second, there is the rendition of the Canaanite *š-* as *sk-*, *skh-* and *khs-*. Accepting these allows one to explain previously inexplicable semantic bundles. For example, the Canaanite $\sqrt{\text{šll/h}}$ “spoil, plunder” appears to have as its basic meaning “to flay an animal” or “to strip the bark from a tree,” as found in the Arabic *salāḥa*. In Greek one finds not only *sylaō* “to strip the arms from an enemy, pillage,” but also a cluster around *skyllaō* “pillage” and *skula* “arms taken from a beaten enemy.” *Xylon* in Greek means “brushwood, wood used for construction,” and *xēō* is “to scrape, scratch, polish.” If the word had been borrowed before 1500 BCE the *s-* would have become *h-*, and indeed one finds *hyle* “brushwood, wood that has been cut down for fuel.” Several other similar clusters are described.

The second section of Chapter 13 is concerned with words originating from the Afroasiatic fricative lateral /*l*/, resembling the Welsh /*ll*/. This form survives today in some South Arabian languages and clearly persisted in Canaanite as /*š*/ well into the First Millennium BCE and later still in Arabic. Non-Semitic speakers heard it alternatively as /*ls*/, /*s*/ or simply /*l*/. The best known example of the first is the Hebrew word *bāšām* rendered *balsamon* “balsam” in Greek. The other two alter-

nations can explain semantic clusters beginning with s- or l-. For example, the Canaanite root $\sqrt{\text{sp}\text{ḥ}}$, later $\sqrt{\text{sp}\text{ḥ}}$ “bark, skin, thin cover, eruption, scab.” This single source has two Greek stems: the first around *seḗpomai* “to make rotten, mortify” (from which our “sepsis”). The second is *lepō* “scale” and *lepros* (from which “leprosy”).

The third section of Chapter 13 focuses on terms in which the initial s- has been “sheltered” by a following /p/. The first of three examples given here is the cluster including *spoudō* “zealous,” *sphodra* “vehement” and *spodos* “ash.” These apparently disparate meanings can be derived from the single concept of mourning, and the Canaanite $\sqrt{\text{spd}}$ means “to mourn, wail, smite the breast.”

This book is not concerned with previously accepted Semitic etymologies in Greek, those concerned with exotics and especially with material luxuries. Therefore, in Chapter 14, I consider fourteen plausible Semitic origins for Greek nouns of centrally important semantic clusters. These contain such concepts as “falsehood, truth, beauty, sacred”; such objects as “bronze, temple”; and the most frequent verbs for “to do, come, go, and talk.”

With Chapter 15 the focus of the volume shifts from phonetic correspondences and Greek developments of important Egyptian and Semitic terms to semantic clusters. It is helpful to establish these to show that suggested etymologies are not random isolates but can be seen as elements in a wider environment. This, in turn, enhances the plausibility of each individual proposal. Inevitably this section overlaps some with items that have been discussed previously. As far as possible, this is handled by cross-referencing to the relevant footnotes in other chapters.

Chapter 15 is an attempt to look at Egyptian etymologies equivalent to the type of practical material terms that have been widely accepted as coming from Semitic. The first section is headed “agriculture” and includes marshes, reeds and grass; bushes, trees and fruits; cultivation; livestock; birds; and implements and containers. Other sections concern cooking and medicine. A number of these loans, however, have been abstracted to more fundamental concepts. For instance, the Egyptian *wrwm* “awning, roof” may have led in Greek to both Ouranos [Uranus] and Olympos and *dqrw* “fruit” or “date” provides a plausible origin for *daktylos* “finger.”

Where Chapter 15 is exclusively concerned with Egyptian etymologies, all later chapters cover etymologies from both Egyptian and Semitic. They are in semantic areas in which the search for Greek etymologies from any Afroasiatic language has been severely discouraged, if not forbidden. Chapter 16 covers terms concerning warfare, hunting and shipping. Objections to proposed Afroasiatic loans in these semantic fields has been particularly fierce. For example, the proposed derivation, of *xiphos*, the most common Greek word for sword, from the Egyptian *sft* Coptic *sefe* “sword” has been challenged on trivial grounds. Similarly, the Semitic etymology for another frequent Homeric word for sword, *phasganon*, has been systematically neglected. For scholars working in the Aryan Model the idea that these and many other military terms could have come from “Orientals” whom Aristotle had described as “of slavish disposition,” was inherently impossible. The richest family of Greek military terms is that around *stratos* “camp.” This derives from a development of the Egyptian *sdr* “to sleep, spend the night,” *sdr̥t* “bivouac, camp.”

Greeks were supposed to have pioneered navigation. Thus, one finds a reluctance to concede Afroasiatic loans in this semantic field. Two examples demonstrating this are given in the last section of this chapter. While scholars have been willing to accept a Semitic origin for γαυλος “bowl,” they balk at γαῦλος “boat.” Second, scholars accept the derivation of *souson* “lily” from the Egyptian *sšn* “lotus” but reject that of *souson* “ships’ cordage” from *sšnw* “ropes, cordage.”

Chapter 17 treats society, politics, law, and abstraction. The semantic sphere of “society” is necessarily ill-defined. Nevertheless, Afroasiatic loans include the central term *laos* “people.” In the early seventeenth century the great Huguenot scholar Samuel Bochart proposed that the Phoenician word found in the Hebrew *ləʾōm* “people” is the probable origin of the Greek *laos* “people.” No one has since found a better one. Bochart’s proposal is strengthened by the fact that in epic attestations of *laos*, the accusative singular and genitive plural forms with a final -n are more frequent than the other cases.

The section contains many other proposals such as that the Egyptian *wr ib*, literally “great heart” but meaning “insolent, arrogance,” is the origin of *hybris*. This etymology involves the one acceptable metathesis, the alternation of liquid between the second and third positions. The

Egyptian root *ts* means “to tie together, marshal troops.” *Ἱστ* are “troops, a requisitioned gang of workmen.” *Thēs / Thētos* is a “slave, paid worker, laborer, lowest stratum of citizens.” In Greece today *Thēteia* is “military service.”

A standard image in Phoenician art is of a woman looking through a lattice window, symbolizing enclosure. In Hebrew the plural form for lattices is *ḥārakīm*. In Aramaic one finds *ḥārakā* “window.” The Greek *herkos* is an “enclosure around a house by barrier or wall, net for hunting, etc.” and *horkanē* was “prison.” The Semitic loans also include the etyma for the Greek *mitilos* and *mytilos* terms referring to both “cutting” and “youth.” A Semitic root *√btl* “sever” is generally assumed. The most common form of this term is *batul* “virgin” either boy or girl. It is possible that referring to these young people as “cut” suggests male circumcision, which is known to have existed among West Semitic speakers, and female genital mutilation, which may well have done so. Thus, in Semitic, as in Greek and Latin, one finds the double meanings of “youth” and “cutting.” The semantic correspondence more than makes up for the alternation, initial m- for initial b-, a change which is in fact very common.

An interesting pattern can be found in plausible Afroasiatic words for the herding, assembling and counting of cattle and other livestock, appearing in Greek as social and political terms for humans. The relation between *nomos* “law” and *nmi* “to travel, with cattle” has been described above. In Egypt, *i3wt* was a “herd of cattle or humans.” This form provides a plausible etymology for the Ionian and Doric (*h*)*alēs* or *aollēs* “assembly.” The Athenian counterpart for this word was *athroos* “crowd, squeezed together” coming from the Egyptian *idr* “herd.” Then there is the origin of *ethnos* from *tnw* “number” or “numbering,” and *tnwt* “census of cattle, prisoners etc.” These, together with the Egyptian sources for *dēmos* and *iso-* mentioned above, are among the many Egyptian etyma for Greek political terms referred to in Chapter 17.

Chapter 18 deals with religious terminology. Etymologies proposed here include (*h*)*ieros* “sacred” and (*h*)*iereus* “priest” from the Egyptian *i3i* “praise” and *i3t*, later *i3wt*, “office, official.” This form may have been contaminated by *iri* “to do, act” and specifically to “act as an official, celebrate a festival.” Another important Greek religious term is *hosios* “sanctioned by divine law.” *Hosiōtēr* was a “perfect animal fit for sacri-

fice.” The Hosioi were priest at Delphi who were concerned with such animals, and *hosioō* was to “consecrate” or “purify.” An Egyptian etymology, persuasive on both phonetic and semantic grounds, is from the Egyptian verbs *ḥsi* “to sing” and *ḥs(z)i* “to praise.” The Coptic form *hōs* is “to sing, make music, praise.” Still more interesting is the Egyptian *ḥsy*, the Coptic *hasie* or *esie* “drowned or praised person.” The latter was recorded in Greek as *Esiēs*, referred to as the “Egyptian for praised dead.”

The Egyptian *w3g* meant “to shout, a religious festival.” *W3g* was clearly related, through palatalization, to *w3d* “green, make green, flourish,” used for the Delta after the annual flood. It appears to have been transmitted to Greek at two different periods. The first borrowing, when /*ʒ*/ still possessed consonantal value, was as a Greek cluster of words beginning with *org-*. These words cover remarkably similar semantic fields. *Orgē* “passion, anger, temperament,” especially “the changeable moods of women.” Another use of *orgē* is found in a hapax that appears to mean “sacred land.” *Orgaō* “to be full of sap or vigor” refers to fertile land or growing plants. *Orgas* was “well watered but generally not cultivated land.” The second borrowing as (*hyak*) came after the /*ʒ*/ had become merely vocalic. With the suffix *-nthos* from the Egyptian *ntr* “growth, divinity,” it becomes the Spartan spring festival of Hyakinthia from which the mythical hero Hyakinthos gained his name.

The term *mysterion* “mystery” comes from Semitic, probably from the root *√str* “hide, veil,” with a nominalizing or localizing prefix *m-*. The etymology was so obvious that a nineteenth-century German scholar felt obliged to forbid others from even suggesting that *mysterion* derived from *str*.

Chapter 19 is concerned with mythical names, those of gods, strange creatures and heroes. It focuses on the derivation of the name Apollo from *Hpr̄r*, the Egyptian god of the sun at dawn. It also treats the names of many other divinities. These are certainly enough to justify Herodotos’s statement that “the names of nearly all the gods came from Egypt.”

Plausible Egyptian origins for the names of Greek demigods, heroes and monsters are also listed. It is striking how few of these have Semitic etymologies.

Chapter 20 is devoted to place-names. The first section covers names of islands. Among these are apparently a large number of Semitic

etymologies and rather few Egyptian ones. The balance is more equal when it comes to mountain and river names. The difference would seem to me to be the presence of nautical Phoenicians in the Aegean. Thus, Semitic island names given in the Early Iron Age likely replaced several earlier Indo-Hittite and Egyptian names.

The Afroasiatic etymologies of most of the city names mentioned in this chapter were or would be discussed elsewhere. The only substantial argument in this section concerns Corinth, which I derive from the Semitic *qryt* “city.”

Chapter 21 is about Sparta. The name comes from the Egyptian *sp3t* “district, district capital.” Those of Lakonia and Lakedaimon are calques in which the initial Lak- derives from *lakein* “canine behaviour” (gnawing, barking etc.). This connection fits with the fact that the *sp3t par excellence* in Lower Egypt was associated with the jackal god *inpw* “Anubis.” Furthermore, -daimōn “spirit” corresponds with the Egyptian *k3* (ka). Thus, Lakedaimon provides a neat parallel with *k3 inpw*—Kanōbos or Canopus, the western branch of the Nile Delta (that closest to Sparta) and in myth the name of the steersman of the Spartan King Menelaos.

Other cultic and cultural similarities between Egypt and Sparta are also discussed, including the plausible Late Egyptian etymologies for specifically Spartan social and political terms. These similarities fit with traditions that the Spartan lawgiver Lykourgos gained institutional ideas from his travel to Egypt. Spartan institutions are also clearly similar to Phoenician political institutions. Both Egypt and Phoenicia influenced Lakonia during the Early Iron Age.

The Greek Hermes was believed to correspond to two Egyptian gods, Anubis and Thoth. The Anubian aspects of Hermes, Psycho-pompos, leader of souls, were particularly prominent in Sparta. In Chapter 19, I argue that Hermes was associated with the planet Mercury at least as early as the seventh century BCE. Just as the planet’s orbit moved from the “dead” sky of the circling stars to the “live” sky inhabited by the sun, moon and other planets, Hermes/Anubis connected the living with the dead. Many of the complications are considered in Chapter 21, but I conclude that the least unsatisfactory primary etymology for the name Hermes is from the Semitic root *hṛm* /*hṛm* in the sense “to penetrate, pierce, string together.” Also, cults of Hermes and the entry to death were exceptionally well established in Sparta.

The final chapter is on Athens. Previously, I have derived the name

of the city and its goddess Athena from Ḥt Nt, the temple or city of the Egyptian goddess known to the Greeks as Nēith. The one serious phonetic problem with this derivation was the length of the middle vowel in Athēnē. In response to the critics who have noted this, I have changed the proposed Egyptian etymon Ḥt Nt to the equally attested forms Ḥt-nṯr Nt or Ḥt-nṯr nt Nt, “temple or city of Nēith.” These were variant names of what was known in secular terms as Sais, which Plato saw to be the sister city of Athens.

The massive yet elegant semantic parallels between the Egyptian and Greek goddesses and their cities overwhelm any phonetic complications of this etymology. The two cults can be linked iconographically through the so-called Shield Goddess in Minoan Crete and the armor on a pole of the Palladion. The cults of both goddesses involved the weaving of sacred cloth. Historically, one finds in the sixth century BCE simultaneous promotion of Nēith by the pharaoh Amasis reigning from Sais and of Athena by the Athenian tyrant Peisistratos. In the fourth century, Plato described the sisterhood of Sais and Athens and argued that the same goddess had founded both.

Because of the many Egyptian etymologies for other terms associated with Athena and her cult, Chapter 22 is long. In concluding this semantic section of the book, I hope to have shown that, although the proposed Afroasiatic loans can be found in many, if not all, spheres of the Ancient Greek language, they are not scattered randomly but fit together in coherent ways. The richness of the Greek language and Greek culture as a whole comes from its incorporation of many sources and by far the most important were those from Egypt and the Levant.

CHAPTER 1

HISTORICAL LINGUISTICS AND THE IMAGE OF ANCIENT GREEK

NINETEENTH-CENTURY ROMANTIC LINGUISTICS: THE TREE AND THE FAMILY

Nineteenth-century historical linguistics established—and was obsessed by—the idea of language “families.” Unlike the eighteenth-century Enlightenment concern with spatial arrangement and classification, nineteenth-century intellectuals were concerned with time and development. As positivist progressives living in the age of capitalist expansion across the world, they believed in increase and ramification in all things, and, as romantics and geographical determinists, they liked to see simple roots nourished by native soils. Thus, the image of a tree growing and spreading through the ages became dominant in the development of species, or “races,” and languages. Above all, they insisted that good languages were organic, growing from the inside, not inorganic, imposed from the outside.¹

The standard linguistic terms “loan” and “borrowing” themselves indicate something interesting and important about the early nineteenth-century romantic scholars who worked out the Indo-European language family. To them, such terms suggested impermanence and distasteful “trade.” “Family” and “genetic relationship,” on the other hand, suggested permanence and propriety. Similarly, the model of a ramifying tree was not only aesthetically attractive and satisfying but it was also able to explain many relationships between and among languages.

This idea leads to the general principle upon which my whole project is organized: *there are no simple origins*. Thus, imaging historical linguistic or biological development by using the model of a tree, with a single stem from which grow branches and ever smaller branches and twigs, is seldom useful. Only if one takes the multiple roots into account can the tree model sometimes be useful. The past, I believe, is better envisioned as a river in which currents come together to form a unity, then diverge and combine with others to form new unities and so on. The uncertainty of this image should not lead to despair or paralysis. The fact that the chase is endless adds to, rather than detracts from, its fascination.

*Early Perceptions of Relations
between Languages*

Language families were envisioned long before the nineteenth century. Probably even under the Assyrian and Babylonian empires Jews were aware of the obvious relationship between Hebrew and the official language Aramaic. Jews living within Islam added Arabic to the cluster. Judah Halevi (1075–1141 CE) the Andalusian poet who wrote in Arabic and Hebrew, was quite explicit on this relationship. He maintained, in the orthodox way, that Hebrew was the language of God and should, therefore, be used in prayers. He went on to the unorthodox notion that Abraham had spoken Aramaic in everyday life and had taught it to his son Ishmael who had then developed Arabic.² There was a difficulty here in that Hebrew was seen as the paternal language, whereas Arabic is, in fact, much more archaic. Only after the weakening of Judeo-Christian influence on language studies at the end of the nineteenth century was Arabic seen as closer to the original Proto-Semitic than Hebrew.

In the sixteenth and seventeenth centuries, when Portugal became involved in Ethiopia and the Ethiopian church contacted Rome, the Ethiopian classical liturgical language of Ge'ez was added to the cluster of Hebrew, Aramaic and Arabic.³ The outer bounds of the family began to be defined by the Abbé Jean Jacques Barthélemy in the 1760s, when he argued plausibly that, although there were similarities between Coptic and Semitic languages, the Egyptian language did not belong to what he called the “Phoenician” language family.⁴ In 1781 the Göttingen scholar A. L. Schlötzer gave the scheme academic ratification as the “Semitic”—from Noah’s son Shem—language family.⁵

Earlier in the eighteenth century, a number of other language “families” had been recognized. Malay, Malagasy and Polynesian were seen as related in the family now known as Austronesian. The Uralic family, including Finnish and Hungarian, was also established.⁶

Most historical linguists consider these discoveries unimportant. For them the crucial step was what is seen as the heroic foundation of Indo-European studies: William Jones’s Third Anniversary Discourse to the Royal Asiatic Society at Calcutta in 1786. Jones set out what he saw as the excellence of Sanskrit over its “sister languages” Latin and Greek. He saw all these languages as coming from a common source. In addition, Persian and, with some alterations, both “Gothick” and “Celtick” also derived from this source.⁷ Like Schlötzer’s establishment of Semitic, Jones’s scheme, too, had antecedents. Medieval and Renaissance scholars had long recognized that in some languages God was called variants of *Deus*, in others of *Gott* and still others of *Bog*, thus defining the Romance, Germanic and Slavic families. By the eighteenth century these three families had been quite thoroughly worked out.

As early as the sixteenth century, European priests and other travelers had noticed similarities between Sanskrit and European languages.⁸ Where Jones went beyond his predecessors was in focusing on similarities of morphology—the conjugational systems of verbs and the declensions of nouns and especially common irregularities—rather than on mere resemblances between words.

This emphasis has worked well for closely related languages. Furthermore, to study morphology one needs a thorough training, which benefits the guild of professional linguists by keeping out amateurs. This is an important factor behind the preference of historical linguists for morphology over lexicon.

The insistence on the relative unimportance of lexical parallels has hampered attempts to connect more distantly related languages. In fact, common words often outlive morphological parallels. For instance, we know from linguistic history that Russian and English are both members of the Indo-European family. Today, however, the two languages show no morphological parallels. On the other hand, a number of basic words in Russian and English, those for “mother,” “brother,” “son,” “milk” etc. are clearly cognate. Thus, lexical comparison is still an essential tool for relating languages, despite potential confusion caused by chance and the possibility of loaning.

The legend of “scientific” linguistics

By the last quarter of the nineteenth century, linguistics had become a well-established academic discipline. As such it required a genealogy. Therefore, German and Scandinavian practitioners established a standard historiography, or hagiography, of the development of “scientific” historical linguistics. According to their scheme, the discipline passed through four stages or generations. The precursors were Sir William Jones and Friedrich Schlegel; the founders were Franz Bopp, Jacob Grimm and Wilhelm von Humboldt. The consolidators included Georg Curtius, August Schleicher and August Fick and the final developers were the *Junggrammatiker* or Neo-Grammarians, August Leskien, Karl Brugmann, Hermann Osthoff and Berthold Delbruck.⁹ The list reveals a number of interesting and significant features. First, it consists almost entirely of German men. Apart from Jones, only two other non-Germans are referred to as having played roles that do not fit well in the sequence: the Dane Rasmus Rask and the Italian Graziado Isaia Ascoli. The last is the only scholar whose native language was not Teutonic.

In the late twentieth century, the historian of linguistics Hans Aarsleff set up a broader view of the discipline’s origins. Aarsleff argues that the central figure Wilhelm von Humboldt not only spent his formative years in Paris but also drew heavily on the linguistic ideas of French figures of the Enlightenment, especially Etienne de Condillac, Denis Diderot and Joseph-Marie Degérando.¹⁰ The failure to note this influence reveals a desire on the part of the nineteenth-century historians to portray “scientific linguistics” as an essentially Germanic discipline. It also diminishes the role of gentlemen scholars in its development to the benefit of professional academics.

The historical linguist and historian of linguistics Anna Morpurgo-Davies has described Humboldt as “embarrassing” in two major respects: First, his intermediate relationship between the Enlightenment and the romantic positivists of the nineteenth century and, second, the ambiguity of his position between amateur and professional.¹¹ The second embarrassment is true of the founders of all academic disciplines. The first is the more interesting. In Volume 1 of this series, I sketched out the central role of historical linguistics in the formation of the modern university in Germany and elsewhere in Europe and North America.¹² I focused on Humboldt, whom I portrayed as the founder both of the

Prussian—later German—academic system and of modern romantic-positivist linguistics. This view must now be modified in view of Aarsleff's work. Humboldt clearly remained part of the Enlightenment in his broad interest in all languages and in his concern with both their diachronic-historical and their synchronic structural aspects. In these respects he was very different from his successors or one might almost say, in some cases, his products. The latter were exclusively concerned with historical linguistics and with the Indo-European language family and very largely with Germanic or classical languages.

Humboldt was, however, a romantic in his conviction that inflected Indo-European languages were ineffably superior to all others. For him, Sanskrit was the perfect language and Greek the most harmonious.¹³ Sanskrit was knocked from its pedestal as the original mother tongue by the professionals in the second half of the nineteenth century, but throughout the twentieth century Greek maintained its unsullied reputation as the most harmonious language in Indo-European and, hence, world languages. The only challenger was Latin, which had preserved more of the nominal cases of PIE than Greek. Nevertheless, despite the German and British identification with Rome, consolidated after 1870 when both claimed to be empires of the Roman type, academics tended to prefer Greek.

Jones's immediate successors were less cautious than he in their family scheme. Where Jones saw Sanskrit, Greek and Latin as "sister" languages descended from a lost parent, German scholars of the mid-nineteenth century tended to see Sanskrit itself as the ancestral language. Only in the 1860s did scholars begin to see that, although the ancient Indian language was archaic in many respects, in others it had made more innovations. Thus, a trend emerged to revert to Jones's position and give equal or even superior status to Greek and Latin. It should be noted at this point that German historical linguistics did not fit the general progressivism of the nineteenth century and that for the linguists preservation of original features was considered the mark of a superior language. This value influenced German scholars to move away from the name *Indoeuropäisch* "Indo-European," proposed by Bopp to *Indogermanisch*.¹⁴ The suggestion was that the Indo-Aryans and the Germans had been the last to leave their supposed Central Asian homeland and had, therefore, preserved the purest form of PIE.

The Neo-Grammarians

The scholars who made the decisive shift away from Sanskrit as the mother language were the Neo-Grammarians. At one level the move was forced by the recognition that the vowel system of the European branches was objectively more archaic than that of Sanskrit. On another level this shift was an assumption of European superiority in the decades of imperial or more specifically of Germanic—German and English—triumph over the globe and the final jettisoning of all Oriental influences upon Europe.¹⁵

The Neo-Grammarians were described as the final developers of nineteenth-century historical linguistics. Mostly based in Leipzig, they flourished between 1870 and 1900. The epithets “new” or “young” attached to branches of academic disciplines usually indicate continuity rather than the break they wish to indicate. Such continuity was certainly the case with the Neo-Grammarians, who basically only ratified or fixed previous trends. In the previous decades historical linguists had begun to question the maternal role of Sanskrit. Although the Neo-Grammarians claimed to have broken away from their predecessors’ “organicism” (the belief that language was an organism with a life of its own independent of the speaker), they were not, in fact, able to make this break. Furthermore, their own teachers had practiced the positivism they proclaimed.¹⁶

The German positivist linguists’ most important model came from Charles Lyell’s “uniformitarian” geology. Lyell’s scheme projected processes observable in the present onto the past and emphasized steady progress and regularity.¹⁷ This pattern fit well with men who saw the passage of time in terms of the “Whig Interpretation” of British history, as a smooth upward path from the Glorious Revolution of 1689 to the nineteenth century. Men and women in tumultuous continental Europe tended to perceive development rather differently. During the last twenty years of the twentieth century, their view of irregular or catastrophic development even reached complacent academics in the United States. The Darwinian view of gradual biological development has been challenged by scientists like Stephen J. Gould, who have argued against the steadiness of evolution in favor of *punctuated equilibria* or rapid leaps followed by level plateaus. As with the issue of isolationism and diffusionism, I believe that one should be open to the possibility that either steady progress or revolutionary change could have taken place in any particular

period. Uniformitarianism and revolutionary change are connected to the contradiction between diffusionism and isolationism: Although the overlap is not complete, gradual evolution tends to be associated with local development and rapid change is often associated with diffusion, especially that of the genocidal type.

Problems with the Neo-Grammarian scheme

Let us explore the question of the originality of the *Junggrammatiker*. Even what is generally considered to be their greatest contribution, *Die Ausnahmslosigkeit der Lautgesetze* “the exceptionlessness of sound laws,” had been proclaimed by the earlier scholar August Schleicher, against whom they set themselves.¹⁸ According to this principle, every aspect of language change could be explained systematically and rationally. This approach has generally been very successful, and, together with analogies from similar patterns, the “laws” have been able to explain approximately 70 percent to 80 percent of cases within language families.

Such an approach, however, has significant limitations: the laws are not universal but language-specific.¹⁹ Furthermore, they apply only to phonetics not to semantics. Even accepting analogy, application of the laws always leaves a substantial “residue” of inexplicable shifts or resistances to change.

This residue results from a number of factors that disturb the regularity of sound shifts. One of these is what has been called “phonesthemics.” Phonesthemes associate certain experiences or states with specific phonetic elements. These associations can be partially onomatopoeic as with the series slip, slide, slop and sleazy, or flash, splash, dash, crash, clash, mash and hash. Onomatopoeia, however, is not necessary. One finds such clusters as fly, flow and flutter, or, even more distantly, glitter, gleam, glow and gold, or the inconstant or iterative meanings of flutter, fritter, putter, glitter. All of these forms can best be described as “sound symbols,” phonetic associations with meanings.²⁰ These, then tend to form clusters, although they may come from different sources or would “regularly” have diverged.²¹ In such cases, semantics, for which, there is much less regularity, impinges on phonetic “certainty.” Neo-Grammarians and their followers today seldom discuss this kind of mixture. If they are forced to do so, they refer to it pejoratively as “contamination.”

Another source of the residue that cannot be explained in terms of

sound laws is described by modern scholars as “lexical diffusion.” In this process some words undergo regular sound shifts, while others, for no clear phonetic reason, remain unaffected or go in different directions.²² As the historical linguists in the mid- and late nineteenth century focused almost exclusively on Indo-European, they paid no attention to its possible contacts with other languages except for those arising from what they called—using their geological model—“the substrate.”²³ This substrate consisted of the real or imagined influences on Indo-European languages from the non-Indo-European languages of peoples conquered by Indo-European speakers.

The Neo-Grammarians’ lack of interest in non-European languages is easy to explain. First, living in an intensely romantic age, they believed in the creative power of purity and the overriding importance of internal developments. Furthermore, as mentioned above, “they continued to treat language as a ‘thing’ independent of the speaker and his social context” and, further, believed that languages as “independent things” did not mix.²⁴ The linguists, like all European intellectuals of the time, saw the speakers of Indo-European languages as the most active peoples in history. Therefore, they did not believe that their languages could have been substantially influenced by those of “less dynamic populations.” Third, study of language contact risked confusing the image of geologically slow developments because contact could lead to acceleration of change and, even worse, to irregularity.

Walter Burkert, the leading modern authority on Greek religion, maintains when discussing loans into Greek, that “no rules of phonetic evolution can be established.”²⁵ I would not go so far, believing that loans tend to be adapted with phonetic consistency; however, this is true *only when they take place over the same period and between the same dialects*.²⁶ In the real world, languages change and regional dialects vary. Furthermore, loans come through various channels: the literary language, popular contact, religious ritual, trade, slavery or warfare. Loans made at different times or by different routes frequently do not follow the same patterns. Further uncertainty is added by a widespread phenomenon of “folk etymologies,” the turning of strange words into something more familiar. Burkert continued about words introduced into Greek: “They imitate and go into hiding, adapting themselves to the roots and suffixes of native Greek.” He went on to cite the German for “hammock” (an Algonquin word) *Hängematte* “hanging mat” which looks native but is

not.²⁷ An even more dramatic transformation is that of the German *Eidgenossen* “(band) bound by oath” into the French “Huguenot” alleged to be a diminutive of the common name Hugues.

SAUSSURE AND THE TWENTIETH-CENTURY
EPIGONES OF NINETEENTH-CENTURY
INDO-EUROPEAN STUDIES

Since the work of Ferdinand de Saussure, twentieth-century linguistics as a discipline has turned away from the study of the diachronic to the synchronic, from the way in which a language has developed to the way in which a language works as a system at any given time. The few scholars who have remained concerned with historical linguistics have remained in the shadow of their nineteenth-century forefathers.

Only two major developments in Indo-European studies occurred in the twentieth century. The first was the discovery of texts in two (possibly three) extinct “Tocharian” languages in Xinjiang in western China. What is striking about these languages is that in some important respects they resemble western European languages, a fact that suggests that these eastern and western outliers have preserved archaic features lost at the center, and confirms the earlier scholarly move away from Sanskrit as the earliest and purest language.²⁸

The second and more crucial discovery was the decipherment of cuneiform tablets in Hittite, the language of the powerful empire of the Second Millennium BCE which was based in central Anatolia, modern Turkey. The “new” language turned out to be similar to Indo-European though not conforming to the latter’s morphology. The discovery strongly affected the reconstruction of PIE phonology because the language was found to contain indications of two laryngeals /h/ and /hh/. The existence of these laryngeals justified a hypothesis previously put forward by Saussure, who held that, although such sounds, which existed in Semitic and other languages, had not been found in any Indo-European language, they should be reconstructed to explain anomalies of vocalization within Indo-European.²⁹

Hittite, together with a number of other extinct languages found in what is now Turkey, has been accepted as the Anatolian subfamily, the earliest branching away from the Indo-European family. Edgar Sturtevant, the linguist who established Hittite as a sister, not a daughter, of Indo-European, invented the title “Indo-Hittite” to replace the older

term for the larger language family. This title was accepted by a number of general linguists but not on the whole by those specializing in Indo-European.³⁰ Their refusal to employ this useful term would seem to come not only from a reluctance to drop “European” from the title but also from an attachment to the nineteenth-century traditions of Indo-European studies. This devotion to a term epitomizes the modern Indo-Europeanists’ general retention of their predecessors’ tendencies to organicism, geological modeling and the romantic preference for isolation and purity.³¹

While all Indo-European languages have been viewed in this way, Greek, the language of the culture seen as the cradle and epitome of European civilization, has been seen as the extreme of purity. Conventional linguists still see Greek as fundamentally organic. Hence, they attribute its shifts to internal developments unaffected by outside influences. Those aspects of Greek that cannot be derived from Indo-European are attributed geologically to the “substrate.” They have markedly resisted the idea that Greek could have borrowed or copied from other contemporary languages.

RAMIFICATION OR INTERLACING

Walter Burkert wrote about the traditional Indo-Europeanist spirit as it affects Greek:

Greek linguistics has been the domain of Indo-Europeanists for nearly two centuries; yet its success threatens to distort reality. In all the standard lexicons, to give the etymology of a Greek word means *per definitionem* to give an Indo-European etymology. Even the remotest references—say, to Armenian or Lithuanian—are faithfully recorded; possible borrowings from the Semitic, however, are judged uninteresting and either discarded or mentioned only in passing, without adequate documentation. It is well known that a large part of the Greek vocabulary lacks any adequate Indo-European etymology; but it has become a fashion to prefer connections with a putative Aegean substratum or with Anatolian parallels, which involves dealing with largely unknown spheres, instead of pursuing connections to well-known Semitic languages. Beloch even wanted to separate the Rhodian Zeus Atabyrios from Mount Atabyrion=Tabor, the mountain in Palestine, in favor of vague Anatolian resonances. Anti-Semitism was

manifest in this case; elsewhere it was often operating on an unseen level. Even first-rank Indo-Europeanists have made astonishing misjudgments.³²

Burkert's description brings us back, first, to the conventional model of a ramifying tree from a single trunk, rather than one with roots or the image of a complex lattice or mangrove, and, second, to a preference for self-generating developments within languages or language families.³³ The tree model usefully explains divergence but not convergence.

Most modern historical linguists are reluctant to consider areal shifts in ancient languages, especially in PIE and particularly in Greek. Most particularly object to shifts that go across language boundaries of the type found in historically observed changes. It would be much better for Indo-Europeanists, and specially those concerned with PIE and Greek, to consider sociolinguistics and, therefore, be open to the possibility or likelihood of interference from other contemporary languages. They might learn from more recent linguistic developments. For instance, the use of the auxiliary verb "to have" as the dominant or even the sole way to mark the perfect tense appears to have originated in France under the militarily powerful and culturally prestigious rule of Louis XIV. This usage is now found in France; peninsular Spain, but not Latin America; in northern, but not southern, Italy; and in western, but not eastern, Germany. A similar transformation in phonetics is the precisely plotted expansion of the uvular /r/, which started in Paris or Versailles but can now be found generally or sporadically in eight languages: French, Basque, Spanish, Italian, Dutch, Danish, Norwegian, Swedish and German.³⁴ Before investigating contacts between individual Indo-European and non-Indo-European languages, we should consider relations between Indo-European as a whole and other languages and language families. The next three chapters will be concerned with these relationships.

CHAPTER 2

THE “NOSTRATIC” AND “EUROASIATIC” HYPER- AND SUPER-FAMILIES

Linguists seem to have stopped, or at least suspended, the debate over whether there was a single or multiple origin of all existing languages. A consensus that all existing languages are ultimately related to each other now appears to have emerged. Bitter debates remain, however, as to whether it is possible to demonstrate specific relationships or to reconstruct any aspect of the original ancestral language. In general terms, the division is between those crudely identified as “lumpers” and “splitters.” Lumpers look for the common features manifested in different phenomena, while splitters are more concerned with the distinctions among them. Splitters can be characterized as having a desire for certainty and a fear of error. Lumpers tend to believe that perfect accuracy and certainty are not attainable and that the most one can or should aim for is “competitive plausibility.” To put it in another way, lumpers tend to be frightened of two different kinds of error: First, errors of commission often involving the statement “x is related to y” which is later disproved. Second, errors of omission in which no relationship is proposed where, in fact, one exists. Splitters, by contrast, are overwhelmingly afraid of errors of commission.

In recent years, the best known American linguistic lumpers have been the late Joseph Greenberg of Stanford and his student Merritt Ruhlen. Greenberg, who began as an anthropologist, will be remembered as the Linnaeus or grand systematizer of the world’s languages. His classification

of African languages has become standard; his Euroasiatic scheme, similar to that of Soviet scholars, is now frequently accepted. His division of American languages into three families, including the vast "Proto-American," is still fiercely contested. Ruhlen, who accepts all of Greenberg's macrofamilies, is now compiling what is already becoming the standard *Guide to the World's Languages* and hopes to use this wide sweep to reconstruct Proto-Human or Proto-World.¹

At the other end of the scale are the linguistic splitters; the most extreme of whom are the conventional Indo-Europeanists. These work, in the tradition referred to in the last chapter, on the elegant intricacies of the genetic relationships among Indo-European languages. Their attitude is epitomized in a remark by the Indo-Europeanist Eric Hamp, reported from a conference in 1996: "Our job is to produce an absolutely spotless reconstruction of Indo-European. Nothing else really matters."²

Indo-Europeanists tend to be unhappy both with attempts to relate Indo-European to other language families and with the messy and, to them, aesthetically displeasing, process of linguistic borrowings from outside the Indo-European family.³ Though few Indo-Europeanists deny the possibility of wider linguistic relationships, they tend to dismiss any proposal of specific links as "mere speculation." The requirement of certainty is often linked to a certain intellectual rigidity and a reverence for the scholarly ancestors that has made dialogue between them and other comparative and historical linguists increasingly difficult.

NOSTRATIC AND EUROASIATIC

Between the vague generalities of the reconstructors of Proto-World and the narrow-mindedness of the Indo-Europeanists, some scholars work at the intermediate level, considering large clusters of languages. The clusters of most concern to the subject of this book are Nostratic and Euroasiatic. The name Nostratic is distasteful because it is derived from the Latin *nostras* "our countryman," which implies that speakers of languages from other language families are excluded from academic discussion. Nevertheless, no other generally accepted term exists for this very useful concept.

The idea of genetic relationship between Semitic and Indo-European languages goes back to the origins of modern historical linguistics in the early nineteenth century and, beyond that, to the days of the church

fathers and the Middle Ages, when the language of both Eden and the Tower of Babel was assumed to have been Hebrew.⁴ In the nineteenth century, a number of attempts were made to demonstrate the relationship between Indo-European and Semitic verbal roots. Research along these lines, however, was inhibited, partly by the difficulties of achieving certainty but equally by the cult of the noble Indo-European-speaking Aryans. The passionate anti-Semitism of the late nineteenth and early twentieth centuries was equally impeding. The two significant exceptions to such trends were Hermann Möller and his student Holgar Pedersen.⁵ Möller was ignored and Pedersen's ideas on this topic were considered an eccentricity in a major Indo-Europeanist and historian of Indo-European linguistics. Pedersen's views, however, should not necessarily be seen as more enlightened than those of his colleagues, as the French linguist Albert L. M. Cuny pointed out: “Pedersen did not hide his faith in the single origin of the languages of the White Race.”⁶ In any event, as the contemporary historical linguist R. L. Trask puts it: “Pedersen did little work on his idea, and the Nostratic proposal languished half-forgotten in the literature for decades.”⁷

Soviet linguistics

After 1950 Nostratic studies revived in the Soviet Union. During the 1940s, Russian linguistics was dominated by Nikolay Yakovlevich Marr. Marr, who was born in Georgia in 1865, maintained that one linguistic super-family contained Indo-European, the Caucasian languages and Basque. He further held that linguistic stages demonstrated that languages reflected the social and economic organization of the society in which the language was spoken. English, for example, was a bourgeois language. This scheme was officially sanctioned in the Soviet Union from Marr's death in 1934 until 1950. In that year, Joseph Stalin published a short article on linguistics which—for obvious reasons—was widely acclaimed.⁸ In it he denounced Marr's rigid view of the ties between language and society. The article caused a relaxation of political pressures on linguists. Thus, after 1950, Stalin himself protected linguists from Stalinism. Stalin, who was fluent in both Georgian and Russian, did not attack Marr's views on language families. In any event, both before and after 1950, the Soviet Union with its staggering diversity of languages required and supported linguists who were not restricted to Indo-European. The state also wanted to establish relationships beyond Indo-European

so one language family could encompass all the languages of the Soviet Union and could be used to unite them into one nation.

For these reasons, it is not surprising that the modern founders of Nostratic studies, Vladislav Illich-Svitych and Aharon Dolgopolsky, emerged independently in Moscow around 1960 and that their ideas spread to the West in the 1970s with the diaspora of Soviet Jews. Illich-Svitych was killed in a traffic accident in 1966, but Dolgopolsky continues his work in Haifa. Another Soviet Nostraticist, Vitaly Shevoroshkin has been installed at the University of Michigan since 1974. From there, over the last thirty years, he has been publicizing these general ideas with great passion.⁹

Such ideas, however, have not been exclusively Soviet or Russian. For decades, Carleton Hodge an American linguist specializing in Ancient Egyptian and the northern Nigerian language of Hausa (which belongs to the Chadic family of Afroasiatic) promoted what he called “Lislakh” to denote a smaller language family than Nostratic. This language merely embraced Afroasiatic and Indo-European.¹⁰ The classicist and Semitist Saul Levin has also been working out detailed comparisons among the western classical languages of Hebrew, Sanskrit, Greek and Latin.¹¹ The scholar most responsible for establishing Nostratic in the West, however, is Allan Bomhard, a computer specialist who works for Chiquita Banana.¹²

Different scholars have given Nostratic different boundaries. Originally, it was described as containing Indo-European and usually Afroasiatic and Uralic, the family to which Finnish and Hungarian belong. A number of linguists now extend the super-family to Altaic (which includes Turkish and Mongol) and Korean and even Japanese, Ainu and Inuit (Eskimo). Also sometimes seen as members of the family are Dravidian, still dominant in south India, and Kartvelian, the family of the Georgian languages of the Caucasus.¹³

In an article published in 1965, Illich-Svitych presented 607 possible common Nostratic roots. Dolgopolsky has claimed more than 1,900 but has so far not published them.¹⁴ Bomhard has brought out a list of 601.¹⁵ Although Dolgopolsky and Bomhard agree on many reconstructions, they are not always in agreement and their lists frequently do not coincide. The mathematical linguist Donald Ringe has challenged all Nostraticists saying that, while the commonality of vocabulary within Indo-European is significantly higher than one would expect, that seen in Nostratic corresponds almost exactly to chance.¹⁶ Ringe does not claim

that this “disproves” the Nostratic hypothesis; he merely says that the lexical similarities do not demonstrate it. He then goes on to insist that “objective proof” is required in historical linguistics.¹⁷ He has been cited as having said words to the effect that: “What matters about all this is the method. The results are not that important.”¹⁸ Ringe’s model has been challenged on mathematical grounds.¹⁹ I have a further objection: his method treats the individual proposed correspondences as equal. As the specialist in east African languages Archie Tucker stated convincingly, “Comparison of pronouns has long played a leading in the postulation of genetic relationship.”²⁰ Indeed one obtains a different picture by looking at the “hard core” of first and second person pronouns or pronominal elements, since these are generally stable and unlikely to be loaned. The pronouns include the following stems:

- *mi-/*me, 1st singular
- *wa/*we, 1st plural
- *na/*ne, 1st plural
- *t^[h] ú-/*t^[h] e-, 2nd singular.

Demonstrative stems beginning with s- and t^[h] as well as relative and interrogative stems beginning with k^{w[h]} exist widely in Nostratic.²¹ So too does a causative /s/.²² Although no morphological or structural features can be traced throughout Nostratic, in Euroasiatic—that is Nostratic without Afroasiatic—they can be detected in a concatenation or chain from Indo-European, or the larger family of Indo-Hittite, to Uralic. The chain continues from Uralic to Altaic from Altaic to Korean and Japanese, Yukagir, Chukchi and Inuit. Kartvelian (Georgian and related languages) and Dravidian are less easy to classify in this way.²³

Common vocabulary is not the only link among Nostratic languages. In the last ten years, scholars led by Greenberg and Ruhlen have turned away from Nostratic toward Euroasiatic. Special relationships with the other members of the old Nostratic, such as Afroasiatic, Kartvelian and Dravidian, are not denied but they are not seen as belonging to the Euroasiatic core. In this book, I shall use the name *Nostratic* for the larger grouping and *Euroasiatic* for the smaller.

In 1990 the Russian scholar Sergei Starostin read a paper in which he argued that PIE, Proto-Kartvelian, Proto-Uralic and Proto-Altaic were “daughters” of Proto-Nostratic and Proto-Dravidian was descended from Proto-Prenostratic. Proto-Semitic was still more distant.²⁴

Starostin’s argument was based on principle of glottochronology set

out in the 1950s and 1960s by Maurice Swadesh, an Indian linguist, based in North America. Swadesh compiled a list of 100 (originally 200) words found in all societies, including those without agriculture. Swadesh argued that such basic words diverged from each other very slowly at a more or less regular rate. Therefore, he maintained, the fewer such words two related languages had in common, the longer their speakers had been apart. Swadesh also maintained, projecting back from historically observed separations like that of English and German, that one could establish an approximate date for those in prehistory.²⁵ In addition to the inherent imprecision of Swadesh's method, even his champion Starostin concedes that his own calculations were in some ways arbitrary. Particular words receive different "weights." Nevertheless, Starostin has faith in both aspects of the basic system, not merely the degree of separation but their absolute dates. He also admits that he only investigated Semitic, not Afroasiatic as a whole.²⁶

Greenberg and Ruhlen agree with Starostin that Afroasiatic is a sister, not a daughter, language of Euroasiatic. Even Bomhard, who was initially attracted to parallels between Indo-European and Afroasiatic, hesitated for some years on the degree of relationship.²⁷ Recently, however, he has rejoined the only published hold-out for a more intimate relationship between the two families—Aaron Dolgopolsky.²⁸

When Afroasiatic is roughly compared to Greenberg's list of common Euroasiatic morphological features (a list that is essentially Indo-European centered), Afroasiatic scores significantly lower than Uralic and Altaic but at very much the same level as the other families.²⁹ On the other hand, Afroasiatic and Indo-European share a feature lacking in other Euroasiatic families—sex-linked gender. The other language families generally distinguish only between animate and inanimate entities. I shall argue in Chapter 4 that Indo-European gender was at least partially copied from Afroasiatic.

Starostin's omission of six of the seven Afroasiatic language families significantly skews the numbers of Euroasiatic cognates he finds. For instance, the first person singular form *mi found throughout Euroasiatic is not found in Semitic but it is in Chadic and Highland East Cushitic.³⁰ In general, the personal and other pronouns given above are almost all restricted to two Nostratic families, Indo-European and Afroasiatic.

Long ago in 1974, the Semitist Robert Hoberman wrote a paper in which he showed convincingly that, following the Hopper-Gamkrelidze reconstruction of PIE (See below Chapter 4), the triconsonantal roots

of Indo-European and Semitic were remarkably similar. Furthermore, they were bound by the same constraints regarding which consonants could occur with each other.³¹

In morphology, the Egyptologist John Ray demonstrated extraordinarily close parallels in both form and function among the Egyptian “stative,” the Akkadian “permansive” and the Hittite *-hi* conjugation. These together with similar Indo-European and Afroasiatic prepositions (discussed below) and the parallel uses of *ablaut* or vowel change led him to conclude, “while we should continue to enter a plea for caution, it is becoming more and more likely that the Semitic, Hamitic and Indo-European languages were originally one.”³²

Ray wrote this without taking into account the discovery in the 1970s of the ancient Semitic language Eblaite. This language was not only spoken, but also one of the written languages used by the bureaucracy of the wealthy and powerful city of Ebla in the middle of the Third Millennium BCE.³³ When studied with the equally ancient Semitic language Akkadian and the “sister language” Ancient Egyptian, some of the Eblaite prepositions show remarkable similarities to reconstructed PIE:

Eblaite	Akkadian	Egyptian	Canaanite	PIE	English
in, ina	ina	m	lə	en	in
ina	ana	n/r	ʔel	an(u)	to, on
ade	adi	r	ʔad	ad	up to, to.
		m	bə	bi/be	by, at. ³⁴
	itti	hn ^c	ʔet	eti	yet, with.

The last two examples have not yet been found in Eblaite, but even so they indicate links between Afroasiatic and Indo-European.

Swadesh’s list does not include any prepositions or conjunctions, even though these forms would seem to be as stable and good indicators of relationships as his basic nouns and verbs. Given this situation, it is interesting to note the remarks of the Semitist I. J. Gelb about these apparent cognates:

One important feature of Iblaic [*sic*] which should not be left out of the discussion concerns the occurrence of certain prepositions . . . which Iblaic shares partly with Akkadian but with no other Semitic language. This very old feature of Iblaic furnishes an important piece of evidence linking early Semitic languages with Indo-European.³⁵

Furthermore, the internal pattern within Semitic of the first two examples, *in* and *ina*, indicates that there was a shift from $n > l$. Egyptian and Canaanite have similar $n > l$ correspondences. In this case, a number of words only attested with /l/ in Semitic become parallel to PIE /n/. For instance, the Akkadian and Arabic *lā* Canaanite *lo* > < **nā* > (the Egyptian *n* or *nn*) “no” strikingly resembles the PIE **nē*. The Akkadian *lilatu*, Ge’ez *lelit* Canaanite, *lyl* “night” but *lyn* “to spend the night” from a reconstructed reduplication **netnet* resembles the PIE *nek*^w-t “night.”³⁶

Such words would seem fundamental and unlikely to be borrowed. On the other hand, as shown in Chapter 1, almost any aspect of language can be transferred. In the case of Afroasiatic (probably its most northern member Semitic) and Indo-European it is clear that many words and probably even the sex-linked gender system (see Chapter 4) were borrowed. One should not overemphasize the genetic relations to the exclusion of later contacts.

At this point, it is worth pushing speculation still further to glance at the possible origins of Nostratic itself. John Kerns believed that it was a branch of the Dene-Caucasian or Nadene, now surviving in the Caucasus, China, Tibet and Burma and in northwest America.³⁷ This idea seems plausible, although, as we shall see below, there appear to be significant Khoisan influences on Afroasiatic.

A place of origin for Nostratic

It would now seem helpful to consider three of the ways in which historical linguists attempt to pinpoint regions of origin. The first criterion by which one can locate the original home or *Urheimat*—to use the German term preferred by linguists—of a language family is simply that of the geographical convenience.³⁸ Find a place in or near the region in which it is known that the languages are spoken, or were spoken historically, and from which they could easily have diffused. This approach is called the principle of least moves.

It would be implausible, for instance, to propose that Indo-European arose in Africa. None of its member languages are attested as having been spoken on that continent and it would be difficult to postulate ways in which Indo-European could have spread over its later known range from such a center. Nevertheless, sometimes languages or language families appear to have originated on, or beyond, the fringe of their later ranges. For instance, the Navahos of Arizona and New Mexico make up

the great majority of Nadene speakers in North America. No linguists, however, suppose that the language family originated there. The consensus is that the language family came from Asia. Nevertheless, in general, geographical plausibility remains a basic way to approach this problem.

A second way of discovering an *Urheimat* is to establish the original geographical range of the speakers of a language family, through vocabulary. The use of words common throughout a language to indicate the level of material culture of the peoples speaking the proto-language has been mentioned earlier. Similarly, other terms can be used to estimate the landscape and climatic zone of the *Urheimat*. One must, however, be particularly careful about this. The semantics of a word for natural phenomena can change drastically. Clearly related words from the reconstructed PIE form **mori* can be found in most European languages but they have a range of meanings from “swamp” to “lake” to “sea.” Thus, the words provide no information as to whether or not the speakers of PIE lived by a sea. On the other hand, the root **bergo* occurs in most Indo-European language families meaning “birch”—although the Latin derivation signifies “ash.” Birches do not grow around the Mediterranean. Similar cases can be made for the common words for willow, as well as for snow and for such animals as the bear, beaver and wolf. These commonalities suggest that PIE developed in a territory with a northern climate. Although this technique should be used with great caution, it can provide some indication of a language family’s original home.

The third method of locating the place from which a language family dispersed is to look at the degree of variation among dialects or languages in a given area. Behind this method is Swadesh’s idea that all languages diverge at approximately similar rates over time—fundamentally, the principle of glottochronology. While glottochronology is concerned with time, the principle of diversity is concerned with space. That is to say, the greater the variations of a particular language or language family in a particular region, the longer it is likely to have been spoken there.

The most commonly used example of this principle is that of the distribution of English dialects. In Britain, where English has been spoken for more than a thousand years, there are many distinct dialects, some of them like Geordie, which is spoken in parts of Durham and Northumberland, restricted to quite small areas. Along the east coast of

America, where English speakers have lived for three to four hundred years, distinctive dialects can be found in New England and “the South.” By contrast, in the vast territory of the Midwest and West where English has been used for less than two hundred years, there is a remarkable uniformity. Time is generally more important than space in the diversification of languages.³⁹

One problem with this principle is that many languages are not left alone to diversify in peace and are affected by neighboring languages. Thus, they can produce different dialects and languages at much faster rates. For instance, the speech of New York City is distinctive because it has been heavily influenced by the high proportion of New Yorkers for whom English is a second language. The principle of local diversity can also be misleading if the original region in which the language was formed, or its *Urheimat*, is overrun by a single dialect or another language. For instance, historical records and place names show that the Celtic branch of Indo-European developed in areas of continental Europe where German is now spoken. Today it only survives in western Britain and Brittany.

Another problem is that states can establish common standards of speech over wide areas that tend to obscure earlier variation: French in France, Italian in Italy etc. Today, looking at diversity among Romance languages one would choose Switzerland as the *Urheimat* since French, Italian and Romansch are all spoken there. When in reality we know from historical records that Lazio or the Latin Plain around Rome is the original home. Nevertheless, in the absence of such historical records the principle of diversity is one of the few pointers available to indicate where language families began.⁴⁰

These three methods are full of uncertainties and the earlier the “disintegration” of a language occurs the more difficult it is to discover where it took place. Even so, in conjunction with each other and with linguistic relationships and archaeological remains, these methods often make it possible to establish plausible hypotheses for a language family’s *Urheimat*.

ARCHAEOLOGICAL EVIDENCE FOR THE ORIGIN OF NOSTRATIC AND EUROASIATIC

I shall argue in the following chapters that the Afroasiatic and Indo-Hittite language families originated with the spread of agriculture within the last 12,000 years. Therefore, the origins of Nostratic must go back still further at least into the Mesolithic or Middle Stone Age. An outer

limit is provided by the strong likelihood that modern people (*Homo sapiens sapiens*) only moved out of Africa approximately 100,000 years ago, and the fact that other language super-families exist makes it impossible that Nostratic spread at that time.⁴¹ Thus we are looking for a period between 100,000 and 12,000 years BP (before the present).

Nostratic and the “Epipaleolithic” cultures of the Nile

The linguist Carleton Hodge proposed that Lislakh, his name for Nostratic, began in the Middle Nile between 20,000 and 14,000 years BP.⁴² Archaeologists agree that group of Late Old Stone Age cultures did indeed flourish along the Nile in Nubia and Upper Egypt between 18,000 and 14,000 years BP. The general name given to this type of culture is sometimes confusing. Some observers use Middle Stone Age or Mesolithic. Since Mesolithic cultures, however, tended to be coastal and the Middle Nile is far from the sea, these cultures are generally called Epipaleolithic. These people lived by gathering seeds and fruit, hunting small animals, catching birds and fishing, but increasingly they also harvested and ate grains. The large numbers of querns, or grinding stones, found in the area make this fact evident. Furthermore, recovered teeth of these people were found to be worn down, apparently from eating grain containing grit from the grinding stones.⁴³ Querns, however, were also used for tubers, charred remains of which have been found from this period, 18–17,000 years ago.⁴⁴

What is striking about these cultures, apart from their dense population, was their use of microliths.⁴⁵ Microliths are tiny flints or other sharp stones blunted on one edge so they can be set in wooden shafts as arrow heads. They make it possible to hunt small game with bows and arrows and were also set in series on sickles, imitating animal jawbones. Their use on sickles allowed for harvesting of grasses, for the first time, and the development of agriculture.⁴⁶ Finely made microliths had been developing in various parts of central and southern Africa as early as 70,000 years ago.⁴⁷ They appear to have spread north to the Nile Valley cultures by 17,000 BP. Sheen indicates that many microliths were in fact used for cutting grasses, possibly including barley.⁴⁸

As I hope to show below, Afroasiatic probably began somewhere between the confluence of the White and Blue Niles and southern Ethiopia and northern Kenya around 11,000 BP and Indo-Hittite in central

Anatolia around 10,000. Thus, in looking for the original speakers of Proto-Nostratic, we need a population living between or near these two zones sometime between 30,000 and 12,000 BP.

Languages usually expand when their speakers have a greater power or possess some social or economic advantages over their neighbors. Latin spread with the Roman Empire, Arabic with the expansion of Islam and English with the British and American empires of the nineteenth and twentieth centuries. Thus, in searching for the material culture of the speakers of Proto-Nostratic, one should focus on what appear to have been the most successful societies and estimate their level of development. As mentioned above, one method of estimating the time at which a language family broke up is to look at the technology for which there is a common vocabulary in the daughter languages. Thus, for instance, Indo-Europeanists plausibly argue that PIE speakers possessed agriculture and polished stone tools but did not cast metal, because no words for “bronze” or “cast metal” are common to members of the family.

By general agreement, the initial spread of Nostratic cannot be attributed to agriculture. Dolgopolsky states that the speakers of Proto-Nostratic were not agricultural and that their language “has no words for sowing or ploughing, but has words for harvesting.”⁴⁹ Furthermore, he believes that the proto-language had no word for pottery.⁵⁰ Allan Bomhard holds that Proto-Nostratic had roots involving the preparation of vegetable foods: $\sqrt{bar/b\bar{a}r}$, “grain, cereal, barley,” $\sqrt{gar/g\bar{a}r}$, “crush, grate, grind” and $\sqrt{mul/mol}$, “rub, crush, mill.” He, too, can find none for planting or sowing.⁵¹

A proto-agricultural society in the Nile Valley during the later stages of the last Ice Age would fit well with what one would predict from verbal roots common to Nostratic. The advantage that people of the Middle Nile possessed was, as Hodge suggested, microliths.⁵² As mentioned above, there is no doubt that southern Africa was the earliest region to develop these. They appear not to have reached Europe until around 9000 BP.⁵³ In China, however, microliths could possibly go back to 24,000 BP and they were certainly widespread by 22,000.⁵⁴ Although much later than the early southern African microliths, the Chinese artifacts are earlier than those of the Nile cultures. More than likely the Chinese invention was independent. It is interesting to speculate that the lack of the “Nostratic advantage” is the reason why Chinese remains in the earlier Nadene family.⁵⁵

The major objection to the hypothesis that Proto-Nostratic came from

such a proto-agricultural culture is that, although the stone tools used at this time in the Nile Valley generally followed the microlithic tradition, the proportion of microliths used and the types of tools made, varied considerably from place to place and time to time.⁵⁶ Archaeologists may have exaggerated these distinctions. We know that modern people use rocks that are locally available and that the quality of different stones affects the types of tools made. Furthermore, when people camp in specific places to exploit particular resources they use very different tools.⁵⁷ The variation of lithic culture does weaken the hypothesis that the Nile proto-agriculturalists had a single, or even a single dominant, language.

Nevertheless, I am convinced that the advantages of the argument outweigh the disadvantages. Dolgopolsky argues on the principle of *Wörter und Sache* “words and things” that the existence in his reconstructed Proto-Nostratic of roots for “snow” and “frost,” as well as for “leopard” and “hyena,” indicate a warm Mediterranean *Urheimat*.⁵⁸ Dolgopolsky believes that it was in southwest Asia. The four thousand years between 18,000 and 14,000 BP or 17,000-13,000 BCE were still in the last Ice Age and the climate of Lower Nubia and Upper Egypt then was apparently considerably cooler and more humid than it is today. That climate resembled that found after the end of the Ice Age in the foothills around the Fertile Crescent in southwest Asia. In the earlier case, however, the annual flood of the Nile helped the natural abundance.

Kerns, who located the origin of Euroasiatic in the Fertile Crescent just south of the Caucasus, agreed with Carleton Hodge on the type of culture that promoted Nostratic:

The more I study the matter, the more I am convinced that the spread of the Nostratic speaking peoples was occasioned by the spread of Mesolithic culture, for it occupied the right positions in time and space and its characteristic features are compatible with the residual vocabulary of the Nostratic families—it was the last of the pre-agricultural eras in Eurasia.⁵⁹

Working from linguistic evidence, Kerns suggested around 15000 BCE for Proto-Nostratic.⁶⁰ Starostin, using glottochronology, arrived at circa 11000 BCE (13000 BP) for the break up of Pre-Proto-Prenostratic including Dravidian and that of Proto-Nostratic at circa 9,000 BCE (11000 BP).⁶¹ Thus the evidence from archaeology and linguistics is roughly in synchrony.

The breakup of the Middle Nile culture

Both the size and the number of settlements found strongly suggest that the population boom at this time suddenly decreased, possibly owing to a series of extremely high Nile floods. Similar population density along these stretches of the Nubian and Egyptian Nile Valley was not reached again for another 6,000 years, until just before the beginning of dynastic rule in the Fourth Millennium BCE.⁶²

Meanwhile in Palestine, a similar culture, the Kebaran, may be dated as early as the Thirteenth Millennium. This culture, like the earlier and contemporary Nilotic cultures, appears to have been proto-agricultural with microliths and mortars. Given the earlier development of microliths and mortars and the consumption of grains further south, the Nile cultures probably give rise to the Kebaran. The African linguist and prehistorian Christopher Ehret sees the Kebaran as having interacted “by the 12th millennium BCE at the latest” with the Mushabian culture of Lower Egypt, which collected wild grass and grain. From this mixture, the proto-agricultural Natufian culture emerged between 11,000 and 10,000 BCE.⁶³ In the following millennia Natufian culture played an important role in the creation of southwest Asian agriculture.⁶⁴ The significance of Africans in these cultures and early development of agriculture in southwest Asia and Anatolia can be seen from “African” skeletal traits and painted images both among (Mediterranean) Natufians, and early farmers (at Çatal Hüyük and Nea Nikomedia).⁶⁵

I think it is helpful to see the Mushabian and Kebaran microlithic and proto-agricultural material cultures as those of the speakers of Proto-Euroasiatic. In the improving climate and the opening up of the glaciers of Asia and Europe, Euroasiatic spread into Eurasia replacing Nadene and other language families spoken by Paleolithic hunters and gatherers, especially the big game hunters, whose game was becoming extinct.

The origins of agriculture

Until about forty years ago, prehistorians simply saw the adoption of agriculture as an advance of knowledge and technique worthy of the title “revolution.” More recently, however, this idea has been qualified by the discovery that many peoples who gather wild fruits tubers and grains today have a good knowledge of plant propagation but are still reluctant to grow food. They argue, quite reasonably, that since they can

reap enough wild plants why should they go to the trouble of sowing them? In some ways, then, the adoption of cultivation should be seen not as progress but as the result of failure—the failure of wild plants to sustain the population. On the other hand, once women and men begin to select grains for planting genetic planning could certainly have raised yields sharply. This increase coupled with a greater regularity of harvests can allow for bigger grain supplies that could support much higher population densities.

GORDON CHILDE AND COLIN RENFREW

At this point we should consider two of the dominant figures in twentieth-century British archaeology and “deep” linguistics, Gordon Childe and Colin Renfrew.

Gordon Childe

Born in Sydney in 1892, Gordon Childe was both ugly and charismatic. As an upper-class Australian, he studied at Oxford where he became interested in the origins of Europe and particularly in the nature and diffusion of the Indo-European language family. In the early stages of his career his political views were the very Australian combination of social radicalism and racism. His first major book was entitled *The Aryans*. Later he became a Marxist and realized that the two belief systems were incompatible. He became a consistent opponent to Nazism and racism in both politics and archaeology. As a Marxist, Childe shifted his interest from language to prehistoric material cultures, but he never lost sight of the information to be gained from other sources of information. Equally, he took a middle position on the question of diffusion. He rejected the view of prehistory as a series of migrations and conquests by “master races” who imposed their civilizations on lesser peoples or simply exterminated them. On the other hand, he was fascinated by what he saw as the spread of specific cultural traits. Thus, he proclaimed what he called “modified diffusion” in which, at certain times for various reasons, cultures adopted and adapted features from elsewhere.

Childe was concerned in particular with what he saw as “the irradiation of European barbarism by Oriental civilization.”⁶⁶ Even during the later stages of his life, however, he viewed “the irradiation” only as a “prelude” to the “real” European civilization of the Indo-European

speakers. Still, affected by his earlier notions of excellence and survival of the fittest, Gordon Childe committed suicide in 1957 by throwing himself off a beloved mountain in New South Wales. In a letter, only opened twenty years after his death, he explained that he did not want to be an old man inhibiting younger scholars and hampering the development of the field.⁶⁷

Colin Renfrew

In a surprising number of ways, Colin Renfrew sees himself as Childe's successor. Although he may not seem so at first glance, Colin Renfrew is a spectacular figure. For a time in the 1950s, his fate, and possibly those of ancient history and Britain, hung in the balance as the Cambridge student hesitated between conservative politics and archaeology. He chose the latter and, with enormous energy and intelligence, he promoted the "new archaeology"—a school that believes in introducing "scientific rigor" into what they see as a flabby field. Its members promote the use of such techniques as radiocarbon dating and neutron activation. They also support those who argue that techniques devised to study Old Stone Age cultures should be applied to research on later periods. These techniques would include the mathematical study of the distribution of material objects, such as flints and pot sherds. Applied to later periods, these methods might cover a given area and the calculation of ecological niches, such as the amount of land and resources needed to support a given population.

For such schemes, islands might form the ideal units and there is no doubt that for Renfrew the most exciting and rewarding sites have been the Cyclades Archipelago southeast of the Greek mainland and the Orkney Islands to the north of Scotland. Very much a child of the 1940s and 1950s, Renfrew loves "Modern Art" and simple purity of form and line. These ideals are elegantly represented by the beautiful smooth marble Cycladic figures from the Early Bronze Age and by the scalloped treeless land and seascapes of bleak and wonderful Orkney. Although consciously reacting against the lush romanticism of the nineteenth century, the romantic search for purity and authenticity survived in this new form for most of the twentieth.

Renfrew may have abandoned politics but his past has stood him in good stead. For members of the establishment, he stands out in an academic world where brilliance and left-wing views tend to be distressingly

aligned. Hence, he is now a lord, the former Master of Jesus College, Disney Professor of Archaeology at Cambridge and director of the well-endowed McDonald Institute for Archaeological Research. These positions, combined with his energy and intelligence, make him a major power in international archaeology.

In many of his ideas and even in the specifics of his career Renfrew has followed the lead of Childe: Childe was concerned with the origins of agriculture; Renfrew is concerned with the origins of agriculture. Childe wrote books on the roots of European civilization; Renfrew wrote a book on the roots of European civilization. Childe excavated in Orkney; Renfrew excavated in Orkney. In two major respects, however, they have differed profoundly. First, in politics, where Childe was a Marxist, Renfrew is a conservative. In another way, however, Renfrew has been much more radical than Childe. Where Childe was a modified diffusionist, Renfrew began his career as a strict isolationist.

One of Renfrew's initial major preoccupations was the denial of Near Eastern origins for Europe. Childe wrote extensively about the “Oriental Prelude to European Prehistory” while Renfrew's major work, although dedicated to Childe, has the remarkable and provocative title of *The Emergence of Civilization: The Cyclades and the Aegean in the Third Millennium BC*. In this work he claimed that despite the undoubted similarities between technical developments in the Near East and the Aegean, there was no reason to suppose that the development of the two cultures was connected. Furthermore, he argued, since the beginning of the Neolithic, Europe had been distinct from Asia and Africa and European cultural developments had been essentially local.⁶⁸

Renfrew also found the conventional view of the diffusion of Indo-European intolerable as it required substantial outside influences in Europe, thousands of years after the first practice of agriculture there. In 1987 he published a book entitled *Archaeology and Language: The Puzzle of Indo-European Origins*. In this he argued against conventional wisdom, that Indo-European had started as the language of early agriculture in central Anatolia and had spread from there westwards to Europe and possibly eastwards to Iran and India.

Even sympathetic reviewers objected that Renfrew had not made the crucial distinction between the broader language family of Indo-Hittite and Indo-European in the narrow sense. They also objected that the early agriculture of Iran and India was associated with peoples who were clearly not Indo-Hittite speaking.⁶⁹

Renfrew responded imaginatively to such criticisms. In an article published in 1989, he argued that the origins and spread of both Indo-European and Dravidian should be linked to the development of agriculture. That is to say, the inhabitants of the hilly areas around Mesopotamia and further west spread their culture and language as they migrated. In so doing they brought agriculture into areas that had previously only been sparsely inhabited by hunters and gatherers.

In the 1990s, Renfrew went still further, making a u-turn from his earlier isolationism. He has become a “long-ranger” and is now interested in macro-language families and vast temporal and geographical sweeps in prehistory. Using his powerful academic position, he has single-handedly made Euroasiatic and Nostratic and other possible distant linguistic relationships, legitimate topics of scholarly debate in the West. He invited Dolgopolsky to publish his Nostratic hypothesis and then asked others sympathetic and hostile to it to comment. He has continued to bring out books on American languages and “Time Depth in Historical Linguistics.”⁷⁰

LANGUAGE AND GENETICS

Before ending this chapter it would seem useful to consider something that I believe to be a red herring, at least on the questions with which we are concerned. During the past few years, a number of scholars have tried to link language to genetics. They have shown, for instance, significant correlations between very slight genetic differences and national and linguistic divisions in Europe.⁷¹ While these correlations may hold for individual languages, they do not hold true for language families. For example, Slavic speakers are closer genetically to Hungarians and Turks, who speak non-Indo-European languages, than they are to speakers of the Indo-European German and Italian. General attempts to correlate language families with genetic populations are even less impressive. Even the Italian geneticist Luigi Cavalli-Sforza, who proposes such correlations, concedes that the Sino-Tibetan language family, which includes Chinese, Tibetan and Burmese, is spoken by two genetically distinct populations, the north Eurasian and southeast Asian.⁷² Even more striking is the case where peoples of starkly different Melanesian and Polynesian physical appearances speak languages of the quite closely related Oceanic subfamily of the Malayo-Polynesian family.⁷³ The case

of Afroasiatic, which bridges the most profound genetic divisions, will be considered later.

What should be made clear at this point is that in looking at the spread of Nostratic, we are considering cultural and linguistic shifts with no necessary connection to genetic or “racial” ones. By the period 16,000–10,000 BCE, we are looking at relatively rapid cultural and linguistic diffusion in which whole populations may or may not have migrated. Thus, it would seem likely that the hypothetical northwards spread of Nile Valley proto-agricultural culture was primarily a cultural and linguistic one, even though peoples with African characteristics appear among the early agriculturalists of southwest Asia.⁷⁴ In the long run, neither the Caucasoid populations of southwest Asia nor the people of East Africa types found to the south of Egypt changed basically.

CONCLUSION

Dealing with such widespread and varied hypothetical language families as Nostratic and Euroasiatic is bound to cause considerable confusion and uncertainty. Nevertheless, the linguistic and archaeological evidence do converge to provide an approximate period, 15,000–12,000 BP, and an approximate location, the Middle Nile, for the origin of Nostratic and the Mesolithic in western Eurasia. The same tools suggest that Proto-Euroasiatic should be associated with the Mushabian, Kebaran and Natufian material cultures in the Levant. Thus the conventional long-range wisdom that Afroasiatic formed further south and is the oldest branch or sister of Euroasiatic is convincing. A number of significant features, however, suggest a special relationship between Afroasiatic and Indo-European. Some of these, such as the pronouns and the prepositions mentioned above, can be explained by the two families being particularly archaic and less influenced by Nadene and other Asian language families. Others can be explained by contacts between Afroasiatic and PIE speakers.⁷⁵ We shall see later that a number of lexical loans occurred between these two.⁷⁶ Thus, it would seem likely that morphological and other important features of PIE, notably binary sexual gender, were influenced by Afroasiatic. I shall discuss these issues in the next two chapters.

CHAPTER 3

AFROASIATIC, EGYPTIAN AND SEMITIC

THE ORIGINS OF AFRICAN LANGUAGES AND THE DEVELOPMENT OF AGRICULTURE IN AFRICA

Before considering the rise and spread of Afroasiatic, I should like to look at linguistic and agricultural developments in Africa as a whole. As mentioned in the last chapter, Joseph Greenberg usually used the method of mass lexical comparison. He compared word lists for basic things, qualities and processes, generally corresponding to the Swadesh list, from hundreds of languages and dialects. This technique has roused suspicion and hostility from more conventional linguists who have traditionally preferred to compare languages two by two or better still, to examine morphological parallels. As I argued in Chapter 1, while morphological parallels are preferable to lexical ones if one can find them, they are seldom visible among distantly related languages.¹

Using his method of mass lexical comparison, Greenberg established a scheme according to which all African language families could be classified as belonging to one of four families: Khoisan, Nilo-Saharan, Niger-Congo and Afroasiatic.

The Khoisan family is now concentrated in the deserts and scrub land of southwestern Africa but there are possible outliers among hunter-gatherers in east Africa, as far north as Tanzania. Although only spoken

by very few people, these languages are extremely diverse and are widely supposed to be linked only by possessing the famous clicks. They have virtually no common lexicon or items of vocabulary.² This variety suggests that the family is extremely old in the areas where it is still spoken. Its distribution and the present occupations of Khoisan speakers strongly suggest that they had nothing to do with the development of African agriculture. It is also very likely that Khoisan was formerly spoken over much of eastern and southern Africa and was replaced by the languages of the herders and agriculturalists who spoke other languages.

The best known speakers of Nilo-Saharan languages are the Nuer and Shilluk peoples of the southern Sudan and the Luo and Masai of Kenya and Tanzania. Many speakers of these languages are associated with a particular physical type. They tend to be tall, thin and very black. These languages are similar to the Nubian now spoken on the Nile in northern Sudan and southern-most Egypt. Many other less-close Nilo-Saharan languages, however, are spoken in relatively small, but widespread, pockets from the upper reaches of the Niger to the eastern Sahara. As mentioned above, the family could even have links to Dravidian in India. Their widespread and great diversity suggests that this family too is extremely ancient. Although most Nilo-Saharan speakers are now herders or cultivators, hunters and gatherers almost certainly were the first speakers. The range of Nilo-Saharan seems originally to have been in the Sahara and in the Sahel to its south. The complexities of the relations among the different Nilo-Saharan families are epitomized in the very different family trees set up by two of the leading scholars of this and other African language families: Lionel Bender and Christopher Ehret.³

Niger-Congo includes the vast majority of the languages of western Africa as well as the huge Bantu subfamily that covers nearly all of central and southern Africa.⁴ Its success seems to have been linked to the spread of agriculture in the Sahel. Recently, some African linguists have begun to “outlump” Greenberg and they now see Niger-Congo as merely an extremely successful branch of Nilo-Saharan or, as they now call the macrofamily, Kongo-Saharan or Niger-Saharan.⁵

The linguist and agricultural specialist Roger Blench, a proponent of Niger-Saharan, has also pointed out an interesting discrepancy between the great genetic and phenotypic diversity in Africa and the relative simplicity of Greenberg’s language classification. Blench, therefore, has not been surprised to find traces of “remnant” or pre-Niger-Saharan languages in west, central, and east Africa.⁶

With its great reach over time and the impossibility of agriculture contributing to the success of Niger-Saharan, an *Urheimat* for this family more precise than northern and north central Africa is impossible to propose. The spread of the “sub-branch” Niger-Congo, on the other hand, may be related to such African agricultural developments as the domestication of millets and sorghum, as well as to expansion into a well-watered Sahara after the end of the Ice Age. Using the principle of linguistic diversity, the origins of Niger-Congo have conventionally been placed at the western end of the Sahel, somewhere in the region of the Niger’s headwaters. Proponents of this view have assumed that the Kordofanian speakers of the Nuba or Kordofan Mountains of west central Sudan had migrated from the west.⁷ Roger Blench disagrees and bases his argument on linguistics. First, he sees the closest relatives to Niger-Congo within Nilo-Saharan, as Central Sudanic now spoken in Chad and western Sudan. Second, following Greenberg, he sees the great differences between Kordofanian and the rest of the Niger-Congo as indicating the earliest split in the family. Thus, he proposes western Sudan as the *Urheimat* of Niger-Congo. In this case the region of origin seems relatively close to that of Afroasiatic and possibly that of Nilo-Saharan.⁸

THE ORIGINS AND SPREAD OF AFROASIATIC

Paleoclimate and archaeology

Before looking at the linguistic arguments on the origins and spread of Afroasiatic, I will consider the paleoclimatic and archaeological background. As discussed above, correlations between language and material culture are dangerous. Nevertheless, they are necessary, given the lack of historical or precise linguistic information.

When viewing rapid linguistic “explosions” historians have rightly looked for exceptional causes. For instance, the expansion of Bantu can be plausibly linked to the introduction of forest rim agriculture and the use of iron, which opened up a whole new ecological niche.⁹ A similar opportunity opened from natural causes in north Africa in the Twelfth Millennium BP, at about the time, postulated on linguistic grounds for the “explosion” of Afroasiatic.

The end of the Ice Age and the agricultural revolution

The present conventional wisdom on the origins of agriculture is the following: The last Ice Age ended about 12,000 years ago. Its end had two major effects on the world's climate: First was a global warming of the kind that is causing concern today. Second was a general, though not universal, increase of rainfall, as the shrinking polar ice caps and other ice sheets released melting water. In this new climate, it is striking to find that between 12,000 and 6000 BP plant cultivation began in several different regions; southwest and southeast Asia, China, Papua, South and Central America and in a belt across northern Africa. Animals were also domesticated in several of these regions. We do not know enough about the ends of earlier ice ages and it may be that, this time the rapid warming took place in the best possible way to encourage the development of agriculture. What is certain, however, is that for the first time *Homo sapiens sapiens* was present in many continents at such a period, apparently the critical factor in the development of agriculture.

The existence of a very early proto-agriculture in the Nile Valley (discussed in the last chapter) would help explain why southwest Asia and northern Africa appear to have been the earliest regions to go through the agricultural revolution.

In southwest Asia and Lower Egypt, agriculture became based on wheat and barley, wild forms of which still grow in the hills of southwest Asia. For this reason, this region was assumed to be where these crops were first cultivated. From there they were thought to spread into the Nile Valley. Barley, however, could have been cultivated in Ethiopia even earlier. Although wild barleys are not found in Ethiopia, the country contains a far greater variety of domesticated barley than southwest Asia. Following the general principle that a crop would have been first established in a region that now has the greatest diversity of that plant, some paleobotanists have suggested that barley was cultivated in Ethiopia before it was in southwest Asia.¹⁰ The wild Asian barleys could be explained as "escapes" from domestic varieties. It would seem more likely, however, that both the southwest Asian and Ethiopian barleys derived from the barley harvested and possibly sown earlier in the Middle Nile (see the previous chapter). Sorghums, millets and other crops were also cultivated in warmer regions of Ethiopia, possibly as early as the Seventh Millennium BCE, though most were domesticated in other parts of Africa.¹¹

In this warm and wet period what had been—and is now—rain forest expanded into what is now the tree savanna region, and what is now the Sahel became tree savanna. The Sahara shrank to less than half its present size and was divided in two by what has been called the “Saharan fertile crescent,” an area that linked the Sudanese Nile to the Maghreb.¹² “Mediterranean” forest grew in the highlands of Tibesti and Hoggar and from them flowed a network of rivers linking to the Niger and Lake Chad, which was twice its present size. All the east African lakes appear to have been connected to the Nile.¹³

The expansion of thick forest cover made hunting more difficult. Thus the savanna hunter-gatherers (and planters?) were both pushed and drawn into the Sahara. The new ecological niche, however, was far greater than the one they had lost, large numbers of newcomers appear to have driven the original Nilo-Saharan speakers into remote regions, where some still survive many millennia later.¹⁴ Evidence from physical anthropology indicates that during the early “boom” period from the Tenth to the Sixth Millennium BP the population was largely “negroid.” On the other hand, while this appears to be confirmed in early preherding rock paintings, later paintings from the so-called Bovidian period indicate a more mixed population, though still predominantly “negroid.”¹⁵

Khartoum Mesolithic or “Early Khartoum”

A common material culture is known as Khartoum Mesolithic or “Early Khartoum” from its type site, excavated in the 1940s.¹⁶ Evidence of this culture, dating from the Tenth to the Seventh Millennium BP, has been found in more than forty sites over a huge range stretching from Central Kenya to Eastern Sudan and as far west as Algeria and Senegal.¹⁷ As Map 1 shows, its ecological zone is quite clear: with one exception, all the sites are north and east of the present Sudanian region of woodland and grass savanna. This area seems to have been tropical rain forest at the time. Most sites are in the present Sahara in regions that were then probably Sahelian grass steppe and light woodland. All were close to what were then lakes or rivers.

The characteristic objects of this material culture were bone harpoon heads, most of them barbed on only one side, or uniserial, and pottery decorated with wavy, or, later, dotted wavy, lines. These local inventions are attested before 9000 BP, earlier than the use of pottery in southwest Asia.¹⁸ In the Sahara the pottery was probably made in imitation of

natural containers of liquids, ostrich eggs and calabash gourds. It appears to have developed from clay basket linings made to prevent seeds from falling through the mesh. Containers like this are still used in parts of Sudan and Ethiopia.¹⁹

Many authors have seen these objects as clear-cut indication of the spread of a single culture.²⁰ The distinguished prehistorian of Africa David Phillipson, however, insists that while the harpoon heads and the wavy line pottery are remarkably uniform “the chipped-stone industries show considerable variation” and may be based on earlier local traditions.²¹ The equally distinguished archaeologist Alison Brooks insists that, given geological differences, lithic cultures over large regions cannot be uniform.²² Thus, the uniformity of the wavy line pottery and uniserial harpoons provides sufficient evidence to justify seeing this material culture as coherent.

The location of the finds near former lakes or water courses and the presence of harpoons both indicate that the society was “aquatic,” or based on abundant fish, turtles, crustaceans and other water life. In this connection, Roger Blench has demonstrated a common vocabulary for many of these creatures, one that cuts across African language families.²³ The archaeologist and geographer of the Sahara, G. Camps has claimed that the presence of pottery in the same sites indicates that agriculture was there in this early period. He argues that, although agricultural sites without pottery have been excavated, “the opposite has not yet been clearly demonstrated.”²⁴ Typologically this statement is mistaken. The Japanese Jōmon pottery, roughly contemporary with Khartoum Mesolithic, was made by people who lived off seafood, completely without agriculture. All that pottery indicates is settlement in one place. Nomads cannot use pottery, which is too fragile to travel. The abundant aquatic life in the Holocene Sahara would have allowed for intensive settlement. The settlers’ livelihood was enlarged by the hunting of hippopotami with multiple harpoons in a way still practiced by the Songhai on the upper Niger and, thousands of miles to the east, the Elmolo on Lake Turkana. Camps plausibly backs his argument for the existence of agriculture not merely by the increasing presence of grindstones and mullers or abraders in the Saharan sites, but also by remains of what he sees as cultivated pearl millet (*Pennisetum glaucum*) from a stratum he dates to about 6000 BCE.²⁵ The editor of the relevant volume of *The Cambridge History of Africa*, J. Desmond Clark, was clearly unhappy with Camps’s conclusion and inserted a subversive footnote doubting it.

Later discoveries in the oases of the Egyptian Western Desert, however, have tended to confirm Camps's early dates for the cultivation of millet.²⁶

The relative uniformity of this Saharan material culture (*pace* Phillipson) and its approximate beginning in the Tenth Millennium BP have been established. Two major problems remain: where did this culture originate and is there any indication of what language or languages its users spoke?

David Phillipson argues that, "The degree of similarity between these Saharan industries and broadly contemporary material from southern Tunisia, supports the view that the initial repopulation of the Sahara may have taken from the North."²⁷ People from all directions probably joined in the Saharan landrush. Nevertheless, Phillipson's suggestion that the predominant group came from the north is implausible. His caution and the word "broadly" were both necessary because Camps has argued that the Neolithic of the Capsian tradition was later and more impoverished materially than both the Mediterranean Neolithic on the coast and the Saharan-Sudanese Neolithic to the south. Camps had previously stated that "there is an evergrowing difficulty in defining precisely the boundary line between the Epipaleolithic (or the Mesolithic) and the Neolithic."²⁸

It is unlikely that the Saharan culture developed along the Nile. True, the wavy line pottery did overlap in time with the last Sudanese Epipaleolithic cultures. In addition, the recent discovery of designs, possibly of fish traps, dated to 8000 BP at El Hosh, between Edfu and Assuan shows that the Nile Valley was not uninhabited during the Holocene.²⁹ Nevertheless, as mentioned in the previous chapter, it is overwhelmingly likely that the population of the Middle and Lower Nile fell drastically in the Holocene after its peaks during the Ice Age. Camps points out that "at the period with which we are concerned [after the Tenth Millennium BP] these Nile countries were not in any way more privileged than the Saharan regions of Bahr el-Ghazal [southwestern Sudan] or the Ténéré [in northern Niger]."³⁰ He suggests that the Saharan culture came from the west. Several early carbon datings from the south Sahara go back to the Tenth Millennium BP and appear to be slightly earlier than the dates associated with pottery found near Khartoum.³¹

If the place of origin of the earliest pottery in Africa—or, for that matter, the western world—cannot be located more accurately than the southern Sahara, prototypes for other aspects of the Saharan culture

suggests a southeastern origin. Most strikingly, southeastern precedents exist for the uniserial harpoons found in the Sudanese-Saharan Neolithic. One likely antecedent is indicated by harpoon finds from Ishango near Lake Edward on the Congo-Uganda border.³² Previous doubts about the antiquity of the finds have now been settled and the earliest strata containing bone harpoons are clearly much more than twenty thousand years old.³³ Even more startling are the harpoons found at Katanda, seven kilometers downstream; they date to 90,000 BP.³⁴ As its excavator John Yellen points out, the seventy thousand-year gap makes this tradition by far the longest lasting nonlithic material culture attested anywhere.³⁵ This early date makes it impossible that the harpoon was borrowed from the Magdalenian culture in Europe, where it is first attested around 20,000 BP.³⁶ In the earlier levels at Ishango the harpoons were barbed on both sides and appear to have developed from arrowheads. The notch to attach a line came later, and uniserial barbs later still. Phillipson, who did not know of the Katanda dates, wrote that:

Ishango, which is the most southerly of the East African harpoon fishing sites, is also the oldest. It and some of the Lake Turkana sites show that this adaptation developed significantly before the local beginning of pottery manufacture. When pottery did appear its earliest East African manifestation showed strong similarities with those of the Sudanese Nile valley.³⁷

With the Holocene these uniserial harpoons appear to spread throughout Africa. They have been found from the Kalahari to Morocco.³⁸

As mentioned in the last chapter, some of the Nile Valley cultures used microliths as early as 17,000 BP. It is unlikely, however, that the Saharan microliths derived from these, even though the culture that produced Early Khartoum wavy line pottery overlapped in time with the Later Nile Epipaleolithic cultures. As the geo-archaeologist Karl Butzer pointed out “the lithic assemblages are clearly different and intrusive.”³⁹ Intrusive from where? To the southeast the pattern is patchy with older stone industries surviving for much longer in many places. Interestingly, however, at Matupi Cave in northeastern Congo, less than 200 kilometers from Ishango, a microlithic industry was active at least thirty thousand years ago. Ishango itself, like many other sites in the region, shows no sign of this advanced industry.⁴⁰ Information about stone industries in western Africa is scanty and unreliable. Phillipson argues that “microlithic technology in West Africa began at least 12,000 years ago.”⁴¹

Thus, although the harpoons can clearly be derived from the southeast, the microlithic stone tools of the Saharan cultures of the Holocene could have come from anywhere to the south of the previous desert. The same is true of pottery and agriculture.⁴²

The most widespread of the Saharan stone assemblages has been called Ténéréan. This beautiful microlithic industry is named after finds in the Ténéré desert in northern Niger. That location, however, is near the western edge of its range. This industry stretched 2000 kilometers to the east to the White Nile above Khartoum.⁴³ The culture was initially largely aquatic and grass grinding. By the Eighth Millennium BP animals were domesticated: sheep and goats from southwest Asia and cattle that had been domesticated locally.⁴⁴ Bones and wonderful rock paintings of the so-called Bovidian period attest to the existence of these animals. The paintings show bicolored cattle—the result of deliberate breeding—and milking. Customs later found among Egyptians, such as tying single legs of a row of calves with one cord also appear. In this connection it is interesting to note Camps's emphasis on the close similarities between Ténéréan and Egyptian fine geometrically shaped flint tools: "the resemblances between the industries are to be found also in the domain of art."⁴⁵

The Western Desert

Let us now consider the oases of the Egyptian Western Desert, the easternmost region of the Sahara. Greater activity occurred along the line of oases to the west of the Nile from Nabta Playa on the south to the Fayoum and Qattara to the north, than along the river itself. Some centuries of Mediterranean rains in the Seventh Millennium BP occurred in the northern half of the belt. Nevertheless, this band was not the well-watered "paradise" of the central Sahara. Wendorf and Hassan described the general pattern: "The vegetation was most likely thin and concentrated around ephemeral lakes. It was an arid open desert steppe with wild grasses, thorn bushes and occasional acacia and tamarisk trees."⁴⁶

Culturally, the band was a zone of contact. Clearly, there were survivals of the old Middle Nile tool-making traditions. On the other hand, one uniserial harpoon and some wavy line pottery have been found, although development of the latter seems to have been inhibited by the abundance of ostrich shells, remains of which were plentiful on the sites.⁴⁷ Sorghum, possibly domesticated, was consumed at least as far north as

Farafra. Bones of domestic cattle have been found at Nabta Playa. All these provide evidence of contacts to the southwest. On the other hand sheep, not cattle, were herded at Farafra in the Eighth Millennium BP, a fact that indicates influence from southwest Asia.⁴⁸

*The languages of the Sahara during the
Holocene*

What language or languages were spoken by the people of the Saharan civilization? A quarter of a century ago, the archaeologist John Sutton proposed that the language was Nilo-Saharan. He used four arguments to justify his claim: first, a geographical correspondence of the material remains of the aquatic civilization to the present distribution of Nilo-Saharan; second, the identification of both the aquatic civilization and Nilo-Saharan with “negroid peoples”; third, the fact that many Nilo-Saharan speakers are now fishermen and, fourth, a Cushitic taboo against fish shows a distinction between Cushitic-speaking cattle herders and “negroid” fishermen.”⁴⁹

Sutton’s hypotheses contain just the kind of bold thinking required in African, or any, prehistory, where, as it cannot be emphasized too often, one is dealing with competing plausibilities not certainties. Despite some quibbles by other writers he has demonstrated the existence of an aquatic civilization by the Tenth Millennium BP.⁵⁰ Sutton’s linguistic conclusions are much less certain than his prehistorical hypothesis. First, Greenberg’s concept of a Nilo-Saharan super-family has not been accepted by all scholars.⁵¹ Second, even if one accepts this concept, the great diversity of this super-family indicates that its disintegration took place well before 10,000 BP.

The present distribution of Nilo-Saharan languages overlaps with the regions occupied by the aquatic civilization. The correspondence, however, is far from being as clear as Sutton suggested. His best case is that of the Songhai in the upper Niger, who speak a Nilo-Saharan language and still hunt hippopotami with harpoons in the way of the aquatic civilization.⁵² Sutton himself admitted that Lake Chad was fished by Chadic (Afroasiatic speakers) and further added, in a footnote, that in two aquatic civilization areas that appear to fit most neatly Nilo-Saharan speech and speakers arrived at quite a late date.⁵³ His statement also applies to another region in which wavy line pottery and uniserial harpoons have been found: around Lake Turkana, in northern Kenya.⁵⁴ There the

Elmolo people, living on islands in the lake, fish and hunt hippopotami in the traditional way and speak Turkana, a Nilo-Saharan language.⁵⁵ These people, however, changed their language from a Cushitic to a Nilo-Saharan one in living memory.⁵⁶ In general, eastern Nilo-Saharan speakers arrived in the region as cattle herders and sorghum growers during the last three or four millennia.⁵⁷

It is also generally agreed that East Sudanic River Nubian, spoken between the fifth and first cataracts of the Nile, came from the west. Sutton argues that they were preceded in the region by other Nubian speakers, possibly including among those Meroitic, the dead language spoken in the Egyptianized civilization that flourished around its capital Meroë above the fifth cataract.⁵⁸ After repeated attempts scholars have still failed to link Meroitic to Nilo-Saharan.⁵⁹ Thus, we can be sure that speakers of many different languages have lived around the Upper Nile, including the Afroasiatic-speaking Beja.⁶⁰

It also seems that only two of the terms associated with aquatic “hippopotamus” and possibly “fish” can be traced to Proto-Nilo-Saharan.⁶¹ Others, such as boat, net, fishhook, bone harpoon, bow and pot, have not so far been found.

The makers of the Khartoum Neolithic culture appear to have been direct descendents of those of the Khartoum Mesolithic.⁶² William Adams, an expert on Nubian history and prehistory, writes, “the Khartoum Mesolithic has a distinctly African rather than a Near Eastern flavour.” Therefore, he argues that these Mesolithic people might well have been ancestors of the present Nilo-Saharan-speaking Nubians.⁶³ This is not necessarily the case if, as I argue, Proto-Afroasiatic speakers were also “African.”

*The origins of Afroasiatic and the Saharan
aquatic civilization*

If there are few common Nilo-Saharan roots for elements of the Saharan aquatic civilization, a number of terms associated with that civilization occur in Proto-Afroasiatic. The most important of these is *qs* “bone” found in Berber, Chadic, Lowland East Cushitic and even Omotic.⁶⁴ The Semitic attestation for *qs* has been disputed, but the number of trilaterals semantically related to this base, make the attestation extremely probable. *Qrs*l/n “small bones” occurs in Akkadian and

Canaanite and, with an initial k-, in Arabic.⁶⁵ *Qs* in Arabic is “to suck the marrow” from a bone. The uniserial harpoons of the Sahara were made of bone. In this respect, the Egyptian *qs* “bone” is particularly

interesting because its hieroglyphic determinative  (T19) gives a precise picture of a “uniserial barbed harpoon.” The central significance of this image is demonstrated by the representation of *wʿ* “one” by 

(T21) “uniserial harpoon” and *sn* “two” by  (T22) “double-sided arrow.”⁶⁶ Triliterals also reflect the other aspect of “bone harpoon.” There is the Egyptian *qʒs* “strong bow, string a bow, bind.” The Hungarian lexicographer of Ancient Egyptian Gabor Takács sees this form as cognate with metathesis to the Semitic *qsr* “bind, compel.”⁶⁷

Another trilateral, *qws* alternating with *qys* “bow, arrow” is found in Semitic, Chadic and South Cushitic.⁶⁸ *ʾ/nqš* means “fowler” or “to ensnare” in Ugaritic and Hebrew. A derivative *môqēš* found in the Book of Job has caused great difficulties to translators. The description is of a struggle with the Behemoth-Crocodile (or hippopotamus) in which *môqēšim* (plural) are used to pierce his nose. The commentator Marvin Pope puzzled, “the verb ‘pierce’ does not suit the action of a snare or trap.” He then cites numerous attempts to solve the dilemma.⁶⁹ This can be resolved by considering the following description of traditional hippopotamus hunting on the Niger, “Sometimes over a hundred hunters pelt the animals with harpoons. The beast becomes entangled in the lines and vegetation and eventually sinks.”⁷⁰ Apparently related roots $\sqrt{qos}$ “strike, pierce” and $\sqrt{kos}$ “pierce, cut” occur in most Chadic and other Afroasiatic languages.⁷¹

The root $\sqrt{hr}$ “net, trap, capture”

The root $\sqrt{hr}$ “to net, trap, capture.” appears widely in Egyptian, Chadic and Semitic. The Egyptian triliterals are *hʒm* “to catch fish,” *hʒd* “fish trap,” *hʒq* “to plunder, capture,” *hʒti* “fine linen, cloudiness,” *hʒyt* “bandage.” In Hausa there are *hard* “to enmesh” and *harg* “to fasten, embroil” or “small harpoon.” Semitic contains *hrm* “to net, to fish,” *hrz* “to string together,” *hrg* “confined” and *hrs* “entangle.”⁷²

*The root *db “hippopotamus”*

The Russian lexicographers of Afroasiatic, Vladimir Orel and Olga Stolbova describe the Afroasiatic root $\sqrt{dab}$ as “big animal” by basing this description on the Semitic $\sqrt{dabb/dubb}$ “bear.”⁷³ It seems more plausible to begin with the Egyptian *db* “hippopotamus.” The first reason for this preference is the Arabic use of the root $\sqrt{dabb}$ “to creep, crawl.” More importantly, another Afroasiatic root $\sqrt{dab}$ “to trample flat” is found in Semitic and West Chadic.⁷⁴ Such a term is entirely appropriate for hippopotami who flatten the land hundreds of feet around their pools during their night feedings. The Hausa word for hippopotamus is *dorina*. The Afroasiatic root survives in that language, however, in *daba* “to collect, surround as hunters.” Then there is *dabilbila* “to trample up ground.” The base $\sqrt{dbl}$ could also explain a root $\sqrt{dbn}$, found in the Egyptian *dbn* “go around a place, encircle.” Takács relates *dbn* to Semitic roots $\sqrt{dabl}$ or $\sqrt{dibl}$ “round.”⁷⁵ Orel and Stolbova see a root $\sqrt{dabin}$ “enclosure.”⁷⁶ Thus, Proto-Afroasiatic appears to have had a common word for the animal and for its hunting, both of which were central to the aquatic civilization.

Plant harvesting and cultivation?

The evidence strongly suggests that Proto-Afroasiatic had a common vocabulary suitable to the aquatic civilization. It is possible to find common roots indicating Neolithic culture if we bear in mind Camps’s warning about the difficulty of distinguishing between the Saharan Epipaleolithic and Neolithic.⁷⁷ There are a number of common Nilo-Saharan agricultural terms for “field,” “herd,” “cow” and “goat.” Blench and Ehret, however, argue separately that their distribution indicates they originally came from Afroasiatic.⁷⁸ Indeed, Orel and Stolbova list scores of common Afroasiatic terms for domestic animals and plants and their collection and harvesting; these can be found in their *Hamito-Semitic Etymological Dictionary*.⁷⁹ Some of these may not indicate that the speakers of Proto-Afroasiatic lived in a Neolithic society since the terms could have been derived from names given to wild plants. Nevertheless, it is unlikely that all can be explained away in this manner. Different branches of the super-family are still less likely to have adapted words for hoeing and planting independently from preagricultural concepts. To give a few examples from Orel and Stolbova: § 2377, *tat- “to sow, plant” in Central Chadic and South Cushitic; § 1106, *og “to dig, cut, hoe” found in

Egyptian and East Chadic; § 1365 *ḥubV “to hoe, till” Semitic, Egyptian and West Chadic; § 1738/9 *mar “hoe” Semitic, Egyptian, Chadic and Highland East Cushitic; § 2177, *sak “hoe” West Chadic, Egyptian, Berber, Semitic; § 566, *ĉud/ĉaʾad “harrow” Chadic, Egyptian, Semitic. Thus, it would seem that Afroasiatic spread with the aquatic civilization and then, or very soon after with herding and agriculture.

African Afroasiatic

The name “Afroasiatic” comes from the fact that languages of this family are spoken in both Africa and Asia. The “Afro-” comes before the “-Asiatic” because seven of its eight subfamilies Chadic, South Cushitic, Central Cushitic, East Cushitic, Beja, Berber and Ancient Egyptian are, or were, spoken exclusively in Africa and the seventh, Semitic is spoken on both continents.⁸⁰ This ratio is obscured by the facts that by far the best known member of this family is the Semitic subfamily of languages and that Arabic—a Semitic language from Asia—is today spoken as a mother tongue or is culturally dominant in over 90 percent of the territory where Afroasiatic has traditionally been spoken. There have been a number of hypotheses about the *Urheimat* of Afroasiatic and, not surprisingly, most of them place it in Africa, although a more precise location is still controversial. Before looking at these debates, it is worth considering the modern successors to the earlier views that the family came from Asia. From these theories came the super-family’s first name, Semito-Hamitic.

Militarev and the theory of Asiatic origin (map 3a)

The idea of an Asiatic origin has, I believe, been a factor in leading a number of scholars, notably the Russian scholars A. Yu Militarev and V. A. Shnirelman, to propose that Afroasiatic originated as the language corresponding to the Natufian material culture of the Eleventh Millennium BCE in Syria and Palestine, referred to in the last chapter.⁸¹ Militarev’s proposal can be backed by the example of southwest Asian crops and stock in north Africa and by the fact that the Levant is relatively close to the original homelands of the other Nostratic language families.

The scheme, however, presents four difficulties. In the first place, as I have argued above, southwest Asia was not the sole source of agriculture

in the general region. Also, the hypothesis cannot explain the deep diversity of Afroasiatic language families in Africa and the great variety of languages within these families. Blench points out that the Afroasiatic languages in southwest Asia are “very undiverse” in general an indication of late development.⁸² Third, an Asiatic origin for Afroasiatic leaves unsolved the location of Omotic, now spoken in southwest Ethiopia. Omotic is widely agreed to be the earliest separate branch of the superfamily.⁸³ Last, such an origin makes it difficult to explain a central feature, not found in Nostratic and among other African languages, that Afroasiatic shares with a number of Khoisan languages: binary sexual gender.⁸⁴

Nevertheless, Militarev and Shnirelman have been supported on genetic grounds by Luigi Cavalli-Sforza and his colleagues who explain the similarities between the populations of southwest Asia and north Africa as the result of a reflux from Asia to Africa.⁸⁵ Against this, the physical anthropologist Shomarka Keita argues that the movement was really in the other direction; that is to say, that Asians and Europeans genetically resemble eastern and north Africans because they derive from these parts of the continent.⁸⁶ Furthermore, not only have recent works shown skeletal evidence of Khoisan presence in Ethiopia but also some studies demonstrate a close genetic relationship between Khoisan and Oromo and Amharic-speakers of Afroasiatic in central Ethiopia. Suggesting to the authors a population continuum across Africa from south to east.⁸⁷ As the anthropologist Daniel Mc Call has argued, however, in the case of Afroasiatic at least, one should be wary of linking ancient genetics to a more recent language.⁸⁸

African origins

All other major hypotheses on the location of the origin of Afroasiatic put it in Africa. The question of where on the continent it should be placed has been affected by what many scholars see as a fundamental distinction between the northern Afroasiatic languages—Berber, Egyptian and Semitic with many triconsonantal roots—and the southern languages—South, East and Central Cushitic; Beja; Chadic and Omotic which have only a few of these roots.

DIAKONOFF (MAP 3B). For most of his life, the Russian linguist and historian I. M. Diakonoff who, among many other achievements, pioneered

Afroasiatic studies, placed the *Urheimat* in the Sahara.⁸⁹ Diakonoff proposed that no later than the Sixth Millennium BCE Afroasiatic split into northern and southern branches.⁹⁰ The northern branch remained in the desert and developed triconsonantalism, while the southern branch moved south of the Sahara and retained the original biconsonantal system. The southern branch divided into the western Chadic and the eastern Cushitic branches. Within the northern branch this scheme requires Egyptian to have split off from Berber and Semitic. When the latter two separated, Semitic passed through the Nile Delta to reach southwest Asia.⁹¹

The idea of an origin in the Holocene Sahara is attractive because of the Proto-Afroasiatic terms associated with the aquatic civilization and mentioned above. Nevertheless, apart from the same difficulties affecting the Levantine hypothesis, three further problems affect Diakonoff's scheme: First, how does one explain the special lexical affinities between Egyptian and Chadic? Second, the Chadic languages become more uniform as one moves from east to west.⁹² This indicates a spread in this direction, not from north to south. Third, apparently for many millennia Nilo-Saharan speakers occupied much of the desert that was unaffected by the Holocene climatic improvement. Some of them still live there.

OREL AND STOLBOVA (MAP 3C). The lexicographers of Afroasiatic, Vladimir Orel and Olga Stolbova, put forward a different scheme. They see the basic division as between two groups: First is between "Cushmotic" and others. Cushmotic includes all the Cushitic families and Omotic. Orel and Stolbova see this grouping not as genetic but as an ancient areal *Sprachbund*. The second division is between Chadic and Egyptian, on the one hand, and Berber and Semitic, on the other. Thus, for them the distinction between bi- and triconsonantalism is insignificant.⁹³

EHRET (MAP 3D). The historian and linguist Christopher Ehret sees the original home of Afroasiatic speakers as along the Red Sea coast from Eritrea to southeastern Egypt.⁹⁴ He envisions the first branching as that of Omotic from the rest, which he calls Erythraic. He then sees a north-south division. He does not, however, strictly associate this with tri- as opposed to biconsonantalism, because he sees the Chadic speakers who largely used biconsonantal roots as having moved south across the Sahara from the Maghreb.⁹⁵ The academic reason for this hypothesis is

what he sees as the frequency of lexical parallels between Chadic and Ancient Egyptian and Berber. (I shall take up the first issue below.) Against Ehret's hypothesis is the point, made above, that the apparent movement of Chadic speakers was from east to west rather than from north to south. Furthermore, although languages of two Afroasiatic families, Beja and Semitic, have been spoken for a long time in the region Ehret proposes as the *Urheimat*, it is not the region with the greatest diversity of Afroasiatic families or languages.

BLENCH (MAP 3E). Another view is that of the agriculturalist and linguist Roger Blench. While he, too, believes in the importance of the distinction between northern and southern Afroasiatic, in addition, he suggests a different scenario. He proposes that the *Urheimat* is in the Omo Valley in southwest Ethiopia. People who remained in the valley became the Omotic speakers. After that division, Blench sees a further divide between North and South Afroasiatic. He believes that North Afroasiatic traveled down the Nile, then branched east to form Semitic and west to form Berber. He associates the Semitic speakers with the Natufian material culture in Syro-Palestine and the Berbers with the preagricultural Capsians, whose material culture appears to have derived from Natufian.⁹⁶ He then faces the problem of why Berber has such relatively little variation if it is so ancient (± 7000 BP) and has been spoken over so wide an area. His answer is that with "a constant pattern of migration" Berber may have reached an "equilibrium state," a term the linguist Robert Dixon uses to describe the relative uniformity of most Australian languages.⁹⁷

According to Blench, Egyptian speakers remained on the Nile and in the eastern Sahara where the language was heavily influenced by Chadic speakers. These Chadic speakers themselves had moved due west from the original *Urheimat* at a later date, around 4000 BP.⁹⁸ Speakers of the other South Afroasiatic languages moved east dividing into the Beja and the East, Central and South branches of Cushitic.⁹⁹ This hypothesis avoids the substantial population and cultural movements required by the ideas of Militarev and Diakonoff and provides a more plausible explanation of the distribution of Chadic languages than Ehret offers. Blench also tries to avoid the genetic explanation of Chadic-Egyptian and Chadic-Berber relations and argues that the many lexical parallels are the result of later loans. Connections with Egyptian, however, are difficult to make if Chadic speakers only reached the southern Sahara in the Second

Millennium BCE. His proposed *Urheimat* is also rather too far north for what he would call the Hadzic (and I, the Khoisan) influences on Proto-Afroasiatic, in which we both believe.

BENDER (MAP 3F). The leading specialist in Ethiopian languages, Lionel Bender proposes the confluence of the White and Blue Niles as the source of Afroasiatic. Beginning about 10,000 BP, he sees a series of “explosions.” The first sent Chadic far to the west and Omotic to the southeast. Soon after, Egyptian moved down the Nile, leaving Berber, Semitic and Cushitic behind.¹⁰⁰ He is skeptical of the common belief in a special relationship between Egyptian and Chadic. He attributes this belief to a greater scholarly knowledge of Chadic than of the Cushitic “branches.”¹⁰¹

The second “explosion” sent Berber to the northwest while Semitic and Cushitic moved into what is now Ethiopia. A final split was between Cushitic and Semitic; the latter moved across the Bab el Mandeb straits at the southern end of the Red Sea. Then through Arabia to its later range. Bender insists that the key grammatical isomorphs within Afroasiatic link Egyptian, Semitic, Berber *and* Cushitic. Where Diakonoff dismissed the sporadic occurrence of trilaterals in Cushitic as unimportant, Bender sees them as significant. Similarly, he emphasizes the fact that both prefix and suffix conjugations, standard in Semitic and Berber, also appear from time to time in Cushitic.¹⁰²

Bender generously acknowledges the influence on this scheme of an unpublished paper, I presented in 1980.¹⁰³ Nevertheless, we have some significant differences. In the first place, where he proposes an *Urheimat* at the confluence of the two Niles, I argued that Afroasiatic originated around the Rift Valley in southern Ethiopia and northern Kenya.

Bender and I both accept the conventional view that the separation of the rest of the super-family from Omotic—a family that Bender was the first scholar to define—was the earliest division. Omotic has very low percentages of basic vocabulary cognates with other Afroasiatic languages.¹⁰⁴ Equally important, Omotic lies outside a significant number of Bender’s morphological isoglosses.¹⁰⁵ On the other hand, Omotic shares enough Afroasiatic features—/s/ causative, /t/ intransitive and the noun plural in /n/—for there to be little doubt of its membership in the family.¹⁰⁶

Several scholars have gone further to suggest that the concept of a “Cushitic” language family is not useful.¹⁰⁷ While all members are linked by morphological similarities, these are not exclusively “Cushitic” but

are shared by other members of Afroasiatic. Bender avoids this problem by constructing a "Macro-Cushitic." In his construction of Afroasiatic as a whole, he now sees an initial three-way split: Chadic-Central-Otomic. Later, Central branched into Egyptian and Macro-Cushitic and, last, Macro-Cushitic into Berber-Semitic-Cushitic.¹⁰⁸

BERNAL 1980 (MAP 3G). I do not believe that the split between Chadic and the rest was as fundamental as Bender supposes. In 1980, I saw the non-Otomic "branches" of Afroasiatic as having "exploded" relatively quickly, within a thousand years. The possible reasons why an "explosion" can be the best model for a linguistic family, come under three headings. First, a large state that had previously established overall linguistic unity could collapse with the resulting breakdown of communication among its segments. The best historical examples of such breakups are the western Roman Empire, the Muslim Caliphate and Tang China. In all three cases, however, strong centripetal forces survived; a unified subpolitical religion in the first two and later political, though not linguistic, reunifications in China. The existence and disintegration of a political state in Africa around 11,000 BP, however, is, to say the least, extremely unlikely.

The second reason for an apparent linguistic "explosion" might be the migration of speakers of a language away from each other with a resulting loss of contact. This migration would have to occur in so short a period that no linguistic innovations would take place between the splits. Such a change could have happened in the case of Afroasiatic but it is less likely than the third possibility.

In the third model, changes may have taken place between bifurcations but these would not be significant enough to be evident because of later contacts between branches or other "noise" that increases with time. Thus, the more distant the period in which a series of separations took place the less easy it is to distinguish relative differences between them. To give a concrete example, the rapid expansion of Bantu was "by African standards a very rapid one."¹⁰⁹ Nevertheless, through lexico-statistics it is possible to pick up fine differences between bifurcations that happened within a century or two of each other.¹¹⁰ Those we are considering, however, took place over the last three millennia. If we were to look at the Bantu family over eight thousand years, it would almost certainly be impossible to detect the order in which splits occurred, let alone have any idea of the time that had elapsed between them. We seem to be in

this position in the investigation of Afroasiatic. The accumulated “noise” of ten thousand years deafens us to the fine distinctions. Thus, to say that the Afroasiatic super-family is the result of an “explosion,” not a “tree,” is not to claim that it developed as fast as, say, Bantu. Nevertheless, this statement does suggest that, with the exception of the split with Omotic, the whole process took less than a millennium.¹¹¹

In 1980, I believed that such a scheme would explain the fact that the structural isoglosses connecting Afroasiatic families as set out by Diakonoff and Bender are remarkably uniform.¹¹² Very much the same picture emerges from Bender’s tables of lexical similarities based on his modified version of Swadesh’s 100-word list. While it is true that Berber, Egyptian and Semitic share a high percentage of cognates, so too does Proto-Chadic; only “Cushitic” and Omotic score significantly lower.¹¹³

Even excluding Omotic, there appears to be no common “Cushitic,” as opposed to Afroasiatic, vocabulary. The Central Cushitic language of Awngi and the “Northern Cushitic” Beja have a cognate percentage of 7 percent and Beja and the South Cushitic language of Iraqw (spoken in northern Tanzania) have 10 percent. These figures are of the same order as the 7 percent Bender gives between Proto-Bantu and PIE and the 8 percent between PIE and Akkadian. As a linguistic family “Cushitic” even fails Bender’s minimum requirement that any member of the family should not have a higher percentage of cognates with an outside language than the average percentage within the group.¹¹⁴ Phonologically, nothing distinguishes “Cushitic” languages from any other Afroasiatic language family.

It still seems to me, *pace* Bender, that the most plausible way in which to interpret this information is to follow Diakonoff, Ehret and Orel and Stolbova in associating Semitic, Berber, Egyptian and Chadic.¹¹⁵

BERNAL 2003 (MAP 3H). Since 1980, I have changed my views. I still maintain that the *Urheimat* of Afroasiatic was in southern Ethiopia or northern Kenya. The linguistic reasons for this preference are the principles of diversity and least movement. The Ethiopian Rift Valley is close to the present location of Omotic speakers. It is also the region with the greatest number not only of Afroasiatic language families but of languages within those families.¹¹⁶ The linguistic and the archaeological indications differ, however. The zone of maximum diversity within Afroasiatic is in the southern Ethiopian highlands. Against this zone is the absence of material evidence from this period around the Ethiopian

Rift lakes, which were dry during the Ice Age. Three or four hundred kilometers farther south, however, on the shores of Lake Turkana, harpoons developed very early.¹¹⁷ This line of thinking moves the *Urheimat* some distance away from the center of Afroasiatic diversity but it does put the location inside regions where Khoisan was spoken.

*Relations between Central Khoisan and
Afroasiatic*

The idea of an *Urheimat* of Afroasiatic in the Rift Valley is reinforced by the strong possibility of links with Khoisan.

While most Khoisan speakers are now in southern Africa, two languages, Hadza and Sandawe, are still spoken by hunter-gatherers in Tanzania.¹¹⁸ Although it has very few lexical parallels with the Khoisan languages spoken farther south, Sandawe would seem to be distantly related not only because it shares the rare feature of clicks but also because it has similar constraints on what can be used as a second consonant.¹¹⁹ The position of Hadza, which has clicks but lacks these constraints, is less secure. Roger Blench classifies it as an isolate “with reasonable certainty.”¹²⁰ On the other hand, Christopher Ehret sees it as an outer member of the Khoisan family.¹²¹ According to Bonnie Sands, Hadza and Sandawe share “large numbers of [lexical] similarities,” but she went on to argue that these could as easily come from later contact as from a genetic relationship.¹²²

Some factors indicate a possible connection between Khoisan languages and early Afroasiatic. First, at a phonological level, as the linguist Amanda Miller-Ockhuizen argues, Khoisan guttural clicks could be considered as clearer articulations of gutturals—laryngeal and pharyngeal. Such gutturals and the constraints against their coincidence in a root resemble those found in some Afroasiatic and, particularly, Semitic languages.¹²³

There appear to be particular parallels between Ethiopic Afroasiatic and Central Khoisan languages: KhoeKhoe or Nama, Nharo, ||Ganakhoe, Shuakhoe and Tshwa are all spoken in a band from Namibia to Zimbabwe. Morphologically, if one accepts Greenberg’s sequence that deictics become articles and on to gender markers, the Nama masculine singular marker -p becomes interesting.¹²⁴ It would fit with the -b as a masculine suffix in Dime and the third-person base -b- in the Ometic languages Gonga, Janjero and Ometo and also -b- as a masculine single marker in Beja.¹²⁵ Then there is the deictic masculine singular

p- in Egyptian. Too much, however, should not be made from this single example as none of the other suffixes match.

Syntactically it is worth noting that the pattern subject-object-verb (SOV), found in the Central Khoisan languages and Sandawe though not in Hadza, is shared by nearly all Ethiopian Afroasiatic languages both Semitic and Cushitic.

While none of these parallels is strong in its own right, their conjunction makes them rather more substantial. They are in fact reinforced by the possibility that the Afroasiatic gender system was borrowed from Khoisan. Whatever their relationship with the Khoisan of southern Africa, both Sandawe and Hadza share with Central Khoisan the features of number and binary sex-linked gender.¹²⁶ The North and South Khoisan languages do not possess sex gender. Normally, one expects the periphery to retain archaic features. Thus, the existence of binary sex-gender in Hadza and Sandawe and in Kwadi, an isolated Khoisan language once spoken in Angola, makes it unlikely that the form is an innovation in Central Khoisan. It is also striking that while Takács lists four loans into Egyptian from Central Khoisan he finds none from the northern or southern branches.¹²⁷ Other linguistic features also suggest that Central Khoisan rather than North and South Khoisan had connections with Proto-Afroasiatic. First, Central has a richer morphology than the “non-Khoe” languages.¹²⁸ Linguists have long recognized that, while inflected languages frequently “break down” to become isolating, isolating languages can often turn particles into morphological features. Nevertheless, even though this breakdown cannot be used to claim that Khoe is more archaic than the northern or southern branches, it does show that the language resembles Afroasiatic.¹²⁹

Equally, while Hadza and Sandawe could have borrowed gender from Afroasiatic, such a loan would have been virtually impossible for Central Khoisan, which now has no neighbor with sex-gendered language for two thousand miles. The fact that neither South nor North Khoisan possesses this feature is best explained by their having lost it through long contact with Bantu speakers whose language has a multiple gender or class system.¹³⁰

In Africa, sex-linked gender only occurs in some Khoisan languages and Afroasiatic.¹³¹ In Indo-European it appears as a secondary feature; this fact will be discussed in the next chapter. As Greenberg pointed out, apart from Indo-European, “other branches of Euroasiatic do not have grammatical gender.”¹³²

A number of writers are skeptical about any attempt to establish genetic relations between Khoisan and Afroasiatic or Indo-European languages on this basis.¹³³ Derek Elderkin, a specialist in South Cushitic languages, argued that genetic relationship is not the only form of connection and suggested what he called an “areal,” neither genetic nor contact, basis for relations between the South Cushitic and Khoisan languages.¹³⁴ As we are considering people, I cannot see how “areal” can avoid the idea of contact. Indeed the genetic relationship between Khoisan and Ethiopic Afroasiatic speakers, mentioned above, raises the possibility that Proto-Afroasiatic was originally a Nostratic overlay on a Khoisan-speaking population.¹³⁵ An apparent example of this possibility on a small scale is Dahalo spoken by a subordinate caste on the Kenya coast; this language is South Cushitic with clicks.¹³⁶ Copying of sex-linked binary gender from Khoisan into Proto-Afroasiatic would explain why Afroasiatic would be the only Nostratic language family to possess gender as a fundamental feature.¹³⁷ Given the vast lexical divergence within Khoisan, it is extremely difficult to trace any lexical borrowings from these languages into Proto-Afroasiatic. Nevertheless, as mentioned above, Takács has proposed four plausible cognates between Khoisan and Egyptian.¹³⁸ Less surprisingly, Ehret sees other important ones in South Cushitic.¹³⁹

To sum up this section, three explanations could cover the existence of binary grammatical sex-gender in both Central Khoisan and Afroasiatic: First, the existence of sex-linked gender in both languages is merely a coincidence; second, Proto-Afroasiatic borrowed the construction from Khoisan and third, Afroasiatic is the result of the imposition of a Nostratic language on a Khoisan-speaking population.

The arguments in favor of the first explanation are that sex-linked gender, although rare, is not a unique feature among world languages. Furthermore, the Khoe system is unlike Afroasiatic in possessing an indefinite form that can sometimes function as a neuter. Finally, the only possible phonetic parallel among the gender markers is the -p mentioned above. Against these possibilities are the arguments in favor of explanations two and three.

In favor of borrowing is the, admittedly circular, argument of geographical proximity with sex-gendered Khoisan languages, if one accepts an Ethiopian or Kenyan *Urheimat* for Afroasiatic. The linguistic and cultural mixing in southern Ethiopia, Kenya and Tanzania has already been mentioned. There is also the fact that binary sex-gender sys-

tems are not merely rare in the world but unique in Africa. Against these are the arguments in favor of the first explanation and those for the third.

The following case can be made for the third explanation: it is undoubtedly possible that anything can be borrowed from one language to another; indeed in Chapter 4 I shall argue that Indo-European borrowed the feminine gender from Afroasiatic. On the other hand, the more superficial aspects of a language, i.e. words, are more likely to be borrowed than the fundamental ones like phonetics and basic structural features. The latter would certainly include gender. Therefore, while there is no trace of the characteristic Khoisan clicks in Afroasiatic (as there are in Dahalo and the South Bantu languages Xhosa and Zulu), the similarity of gender systems can be explained as the result of a Khoisan substrate to Proto-Afroasiatic. Finally, although it is always risky to confuse genetic with linguistic arguments, Semino and her colleagues have found a close genetic similarity between Khoisan and Ethiopian Afroasiatic speakers.¹⁴⁰

All in all, I find the arguments for the third explanation the most persuasive.

The disintegration of Afroasiatic

Given the difficulties in establishing distinct bifurcations in the family, apart from that involving Omotic, and given the great time span, it still seems useful to envisage an “explosion.” For instance, I find it a waste of time to classify “Cushitic” or Chadic as “in” or “out” of Central Afroasiatic. I now accept, however, that one cannot overlook the significance of trilateralism and agree that development in this direction increased in the northern range of Afroasiatic.

Before coming to this discussion, I should like to consider the spread of some of the other branches of Afroasiatic. South Cushitic moved south into what is now Tanzania. Some East Cushitic speakers stayed in southern Ethiopia and others moved east to Somalia. Both South and East Cushitic languages probably replaced Khoisan. This substitution can be seen most clearly in Dahalo. The Central Cushitic speakers moved north to central Ethiopia and the Beja or North Cushitic speakers went still further to their present territory in the north of Eritrea and along the Sudanese and southern Egyptian coasts of the Red Sea.¹⁴¹

As mentioned above, Chadic speakers spread west as far as northern

Nigeria, although the initial territory through which they passed was inhabited by Nilo-Saharan speakers. Unlike Blench, however, I believe that the contacts with Ancient Egyptian indicate that the movement reached the southern Sahara considerably before his suggested date of 4000 BP.¹⁴² As many of these cognate forms appear in Egyptian texts of the Old Kingdom, the only way in which their presence can be explained is to see them as loans from Egyptian into Chadic or vice versa. This possibility, however, is unlikely not only because desiccation of the Sahara had by this point made contact between Egyptian and Chadic speakers more difficult, but also because their forms indicate either very early phonetic exchanges or genetic relationships.¹⁴³

Origins of Semitic

In 1980 I maintained that Semitic had emerged in the region where South Ethiopic Semitic is spoken today. I am less certain of that today. I now think it more likely that Semitic originated either in the Ethiopian province of Tigre or the present Eritrea or in Yemen and the Hadramawt, where many different Semitic languages have been spoken in the past and, in the east of the region, still are today.¹⁴⁴ Thus, I now find myself more conventional and tend to agree with Edward Ullendorff, the Semitist and specialist in Ethiopian languages who wrote thirty years ago: "Whether the original home of the ancestor of these [Semitic] languages is to be sought in the Arabian peninsula or the Horn of Africa is within the realm of speculation and cannot be securely established."¹⁴⁵

I argue that in this region at the southern end of the Red Sea, Semitic increased the number of triconsonantal roots from the relatively small number that existed in other branches of Afroasiatic. Most languages in the world have only mono- or biconsonantals. These can be enlarged by tones, or reduplication, as indeed they appear to have been in Proto-Afroasiatic.¹⁴⁶ Another possibility is the addition of affixes: before (prefixes), after (suffixes) or inside (infixes).¹⁴⁷ This addition seems to be the origin of triconsonentalism, which is generally restricted among world languages to North Afroasiatic and Indo-European.

I believe that Semitic spread both south and north, south to its present range in Ethiopia. The great diversity of South Ethiopic Semitic languages indicates that this process must have begun long before the conventional date of the First Millennium BCE. Semitic also expanded north through what is now the Arabian desert, but which in the Tenth or Ninth

Millennia BCE was savanna. Semitic speakers then went on into the Levant where their material culture appears to have merged with the new southwest Asian agricultural societies into the pre-pottery Neolithic Natufian, which flourished between 9500–7500 BCE.¹⁴⁸ From there herders of sheep and cattle moved to the Nile Delta and on to the Mediterranean zone of northwest Africa, the Maghreb.¹⁴⁹ In this last stage Semitic appears to have been associated with the origins of the Berber branch of Afroasiatic, moving into the northern range of the aquatic civilization. Roger Blench's attempt to explain why such an ancient branch should have diverged so relatively little, through Robert Dixon's concept of equilibrium state, has been mentioned above.

Chadic and Egyptian

While Chadic speakers moved west, the ancestors of Egyptian speakers moved northwest into the savanna of the southern Sahara and became a major part of the aquatic civilization. On linguistic grounds, Takács proposes that "the proto-Egyptian tribes had a long co-existence with the ancestors of Chadic as well as of [*sic*] Nilo-Saharan somewhere in the Saharan macro-area." Takács then sees the Proto-Egyptians as moving east into the Nile Valley.¹⁵⁰

This description fits well with Camps's archaeological conclusion that the descendents of the aquatic civilization moved into the Nile Valley with the increasing desiccation, exacerbated by overgrazing, of the Sahara in the Sixth Millennium BCE. The people were the cattle-herding Neolithic of the "Bovidians" with Ténéréan flint culture. They appear to have been the predecessors of the Badarian culture of predynastic Egypt. In any event it is clear that they represent a sharp break from the late Epipaleolithic cultures of the valley.¹⁵¹ Physical remains from the Badarian and early Naqadan cultures indicate that the population of Upper Egypt was at this time "broadly negroid," which fits with portraiture from the "Bovidian" period of Saharan rock paintings.¹⁵² It is also obvious that the Badarian were the first in a series of predynastic cultures leading to the formation of pharaonic Upper Egyptian and Nubian states.¹⁵³

No doubt these societies were wealthy and materially sophisticated. The intellectual sophistication of their Saharan predecessors is demonstrated by the clear astronomical purpose of stone circles and alignments at Nabta Playa; these have been dated to between 7300 and 6800 BP

(5300–4800 BCE).¹⁵⁴ With this background, we can now theorize that the Egyptian Sothic calendar was established in 4233 BCE, during the Badarian period, 5500–3800 BCE. This was long before the unification of Egypt around 3400 BCE. This calendar was an attempt to reconcile an approximate solar calendar of 365 days with the rising of the star Sirius, which provided a good indication of the beginning of the Nile flood. Instead of altering individual dates every four years to accommodate the extra almost six hours to the 365 days, the Egyptians let the two systems run independently and become increasingly out of synchrony. They would merge every 1,460 years. Fortunately, the Roman author Censorinus reported that the two systems came together in 139 CE. Using his information, one can work back to find the previous years of synchrony: 1317, 2773 and 4233 BCE.

This chronology has caused Egyptologists much grief, since it has been assumed that the calendar began on or near the first political unification. During the first half of the twentieth century minimalist scholars tried to lower the date of unification to fit 2773. Most Egyptologists, however, found it impossible to accommodate such a date to the remains and the reign dates of various pharaohs.¹⁵⁵ The only alternative was to suggest that the calendar was established in 2773, many centuries after unification. Such a solution was made impossible, however, by the discovery of an ivory tablet dated to the reign of the First Dynasty Pharaoh Djer. The tablet appears to present Sirius in its later guise as the goddess Sothis, who is depicted as a seated cow bearing between her horns a young plant symbolizing the year. This sign indicates that already by the early First Dynasty Egyptians were using the Sothic calendar.¹⁵⁶

The one solution that has not been seriously considered is that the calendar could have been initiated in 4233 BCE. The failure provides a classic example of asking what people in a certain period *could have known* rather than what they *did know*. This principle has proved misleading from Meso-America to Megalithic northern Europe. As the Egyptologist Nicholas Grimal puts it, “the archaeological remains suggest that the civilization would not have been sufficiently developed at this period.”¹⁵⁷ The remains at Nabta Playa point strongly to the origin of the Sothic calendar in the Badarian period.

Archaeological evidence indicates that the Nile Delta or Lower Egypt in the Sixth and Fifth Millennia BCE had a very different and apparently less hierarchical society.¹⁵⁸ Its population appears to have been coastal northern African resembling that of the Maghreb. In late Naqada the

two populations appear to have mixed. This mixing intensified—probably intentionally—after the Upper Egyptian conquest of the Delta around 3400 BCE.¹⁵⁹

Such a pattern would fit the linguistic hypothesis that the predynastic inhabitants of the Delta spoke a triconsonantal language intermediate between Semitic and Berber, while those of Upper Egypt appear to have spoken a largely biconsonantal, and possibly tonal, language, one close to Chadic.¹⁶⁰ Thus, the Ancient Egyptian language seems to have originated as a creole containing features of both these branches of Afroasiatic. This possibility does not deny the likelihood of other influences from Beja and Nilo-Saharan and Niger-Congo languages from the south. Nevertheless, the main components were the languages of Upper and Lower Egypt. It would seem likely that the linguistic merger began during the period now called Naqada II, in the early Fourth Millennium, before the political unification around 3400 BCE.¹⁶¹ Presumably the language developed in Abydos, the capital during this period and the two dynasties. We know from burials that many people with Lower Egyptian physical characteristics were in this region during the First Dynasty.¹⁶²

The tension between the two regions persisted throughout Ancient Egyptian history. Egypt was *tšwy* (*Misrayim* in Canaanite) “the two lands.” The division was symbolized by the double crown of north and south and by ubiquitous representations of the two regions as tied together. As late as the Fifth Dynasty, pharaohs still considered themselves to be southerners ruling the north.¹⁶³

The hypothesis that the Egyptian language was a merger of Chadic-Egyptian with Semito-Berber has many advantages. It would explain why Semitic and Berber appear closer to each other than to Egyptian, although intense later contacts between the two make it difficult to determine the extent of the original relationship. Linguistic mixture would also explain why Egyptian, the most ancient attested Afroasiatic language, should have lost so many of the phonological and morphological features of Proto-Afroasiatic, making it less archaic than, for instance, Arabic. As is true with English, the loss of morphology made Egyptian far more reliant on syntax to convey subtleties.

In a fascinating article entitled “Were There Egyptian Koines?” Joseph Greenberg linked the changes in Egyptian from the language of the *Pyramid Texts* to Old, Middle and Late Egyptian and that of Demotic-Coptic to the geographical regions of Upper and Lower Egypt. He argued that the linguistic changes mark movement of the dominant regional

dialect. He further saw the hieroglyphs,  /b/,  /d/ and  “idn” as representing the Semitic words *yd* “hand” *b>* “to come, go, enter,” *>udn* “ear” rather than Egyptian words.¹⁶⁴ Takács vehemently

denies the derivation of  from *b>* “to enter.” He demonstrated that /b/ meaning “foot” is found in many Cushitic and Chadic languages.¹⁶⁵ Similarly, *>udn* “ear” is found in East Chadic as well as in Semitic.¹⁶⁶ Nevertheless, Greenberg’s argument is plausible for /d/ and “idn,” although it misses the point that the vast majority of hieroglyphs do represent Egyptian words.

Greenberg goes on to claim on this basis that “a Predynastic form of Egyptian spoken in or near the Delta was replaced in the Proto-Dynastic [first two Dynasties] period by a koine based on the speech of Upper Egypt.” It in turn was replaced by northern-based Old Egyptian.¹⁶⁷ No evidence exists of any language more archaic than that of the *Pyramid Texts*, the newly discovered docketts from the First Dynasty provide no exception to this statement.¹⁶⁸ Thus, I cannot accept Greenberg’s first claim as I see no reason to doubt that before the unification of Egypt the dominant speech of the Nile Valley was based on that of the leading power, Upper Egypt. Nevertheless, /d/ and “idn” may represent last traces of the merger between Semitic-Berber with Chadic-Egyptian to form the Ancient Egyptian language. The existence of a Semito-Berber component in Egyptian provides the grounds for the minority claim that it was a Semitic language.¹⁶⁹

West Semitic

After the first unification in the Fourth Millennium BCE, Egypt, held together geographically and politically by the Nile, had only one language. By contrast, Semitic, spoken from Ethiopia to Syria and Palestine, broke up into many languages and dialects. The earliest attested of these are Akkadian, written in Mesopotamia, and Eblaite in Syria. Texts in these date back to the first half of the Third Millennium BCE. Both of these languages show evidence of interaction with non-Semitic languages. Sumerian heavily influenced Akkadian, as peoples speaking one or both of the two languages lived in close contact for more than two millennia.¹⁷⁰

Sumerian is a language whose affinities are heatedly debated. Some regard it as an isolate, others as an Austroasiatic language related to the

Munda languages still spoken in India and Mon and Khmer in south-east Asia. Others see it as Nadene and still others as a sister language to Nostratic.¹⁷¹ Eblaite, too, was influenced by Sumerian and also by Hurrian, a Nadene language once spoken over northern southwest Asia and related to Chechen and Ingush, which are spoken in the northeast Caucasus today.

Some scholars see Akkadian and Eblaite as making up an “East Semitic” family. Eblaite, however, is not a dialect of Akkadian. With equal plausibility others put it with Northwest Semitic.¹⁷² This is only one example of the many difficulties in classifying Semitic languages. The level of interaction between and among these languages makes conventional classification more or less arbitrary. The Ethiopian Semitic languages are divided into northern and southern clusters, more or less archaic and more or less influenced by neighboring Cushitic languages.¹⁷³ The ancient and modern South Arabian languages form another group. Some scholars classify Arabic with the South Arabian but others prefer to group it with the Northwest Semitic languages.¹⁷⁴

The Northwest Semitic group generally is described as containing Aramaic, Ugaritic and Canaanite. The Aramaic languages were originally spoken in inland Syria but in the First Millennium BCE they spread as the unofficial language of administration and trade of the Assyrian, Babylonian and Persian empires. Standard Aramaic remained important in southwest Asia under Hellenistic and Roman rule. Hurrian and its successor Urartian clearly influenced these languages.

Ugaritic was the language of the north Syrian port Ugarit, which was destroyed at the end of the Bronze Age. Many texts in Akkadian were found on the site of the port but many others were discovered in the local Ugaritic language that was written with a cuneiform alphabet. Ugaritic is generally considered to be an aberrant Canaanite language, even though it did not share some of the latter’s innovations, notably the so-called “Canaanite shift” of $\bar{a} > \bar{o}$.¹⁷⁵ The Canaanite languages—or rather dialects since they appear to have been mutually intelligible—are generally listed as: Hebrew, Phoenician, Moabite, Ammonite and the language spoken by the writers of the El Amarna texts, ostensibly written in “Akkadian.” Much of what distinguishes the Canaanite dialects from other Semitic languages seems to derive from Egyptian: For example, the complicated effects of tense and aspect and the so-called “waw-conversive” which appears to have been derived from similar uses of the Egyptian particle *iw*.¹⁷⁶

There were also many lexical loans from Egyptian into Canaanite, although very little work has been carried out on this topic. Most of those that are acknowledged concern plants, textiles and other luxuries. Others are of greater social and political importance: the Hebrew *ḥātam* < *ḥātam* from Egyptian *ḥtm* “to seal, complete.”¹⁷⁷ Many scholars have derived the Hebrew *ebîôn* “poor” from the Egyptian Demotic *abyn*, Coptic *ebiēn* “wretched.”¹⁷⁸ *Mas* “corvey” would seem to come from the Egyptian *msi* “troop or people.”¹⁷⁹ The Ugaritic >*adt* and the Phoenician >*dt* “lady” would seem to come from the Late Egyptian *idyf* “young woman” and the Ugaritic >*adn*, Phoenician >*dn*, Hebrew >*ādōn* “lord” from the Egyptian *idnw* “deputy, official.” This terminology reflects the difference of power between the two regions.¹⁸⁰

Many West Semitic words can be found in Egyptian, particularly during the New Kingdom. Tracing these words is made easier since they are written in a syllabic type of hieroglyphs specifically used to represent words and names in foreign languages. These have been treated far more fully by scholars than have Egyptian words found in West Semitic. James Hoch has produced a dictionary of *Semitic Words in Egyptian Texts* with 595 entries. He points out, however, that some of these words were originally Egyptian and were then taken back from Canaanite.¹⁸¹ It is also likely that Semitic words were incorporated into Egyptian at earlier stages but parallel forms with this origin cannot be easily distinguished from (1) genetically related forms and (2) Egyptian loans into Canaanite.

All in all, although Egyptian and Canaanite belong to different branches of Afroasiatic, they have a special relationship both through the initial merger in the Fourth Millennium BCE of Upper Egyptian Chadic-Egyptian with Semito-Berber Lower Egyptian and through, sometimes intense, later contacts.

CONCLUSION

The great majority of the scholars who have considered the issue agree that Afroasiatic originated somewhere in northeastern Africa. They also agree that it is part of Nostratic and related to Euroasiatic either as a “daughter” or a “sister.” The best way to explain this ambiguity is to see Afroasiatic as the southernmost branch of Nostratic spoken in the Upper Nile or further south, after the relative depopulation of the Middle and Lower Nile Valley near the end of the last Ice Age, eleven or twelve thousand years ago. I argue that the common possession of a sex-linked

gender system in the Khoisan or Khoisanoid languages, Sandawe and Hadza, and Afroasiatic indicates early contacts between them. This argument and the fact that the area of greatest diversity of Afroasiatic families is closer to the Rift Valley than to the confluence of the White and Blue Niles, or the southern shores of the Red Sea strongly suggests that it was the *Urheimat* of Afroasiatic.

From this center, branches of Afroasiatic spread out to take advantage of the new resources provided by the warmer and wetter weather of the Holocene that followed the Ice Ages. The primary division of Omotic split into its present region on the Omo River in southwestern Ethiopia. The South Cushitic branch of Afroasiatic spread into Tanzania, the East Cushitic branch to the present Somalia the Central Cushitic to northern Ethiopia. The Beja moved still further north to the Sudanese coast and the Chadic-Egyptian northwest, across the Upper Nile to the southern Sahara. Semitic appears to have been formed in northern Ethiopia or southern Arabia and from there to have moved across the Arabian savanna to the edges of Mesopotamia and then on to Syria and Palestine. Speakers of this branch migrated into the Nile Delta and on to form Berber farther west.

In the Sahara agriculture initially played a lesser role than aquatic hunting and gathering did, but the balance shifted. By the Seventh Millennium BCE, the culture was primarily a herding one based on locally domesticated cattle. With the beginnings of desiccation in the Sixth Millennium BCE speakers of the Egyptian branch moved northeast towards the Nile Valley. There they formed densely populated settlements with considerable sophistication. By the middle of the Fourth Millennium these people had formed the two states of Upper Egypt and Nubia. Upper and Lower Egypt had trading and cultural contacts at least from the beginning of the Fourth Millennium. During this period the Egyptian language was apparently forming from a merger of the southern Egypto-Chadic with the northern Semito-Berber, even before the political unification that followed the conquest of the north by the south around 3400 BCE. Thus, Egyptian and West Semitic, the two Afroasiatic languages with the greatest impact on Greek, were intimately tied to each other.

CHAPTER 4

THE ORIGINS OF INDO-HITTITE AND INDO-EUROPEAN AND THEIR CONTACTS WITH OTHER LANGUAGES

This chapter is concerned with the origins and development of the Indo-Hittite language family and those of its subset Indo-European, which today is the most widely spoken in the world. The chapter also deals with the linguistic contexts in which the two families were formed and the exchanges among these and other languages. As a whole this book is about the impact of two Afroasiatic languages, Egyptian and Western Semitic, on one Indo-European one, Greek. Before being able to isolate these, it is necessary to consider exchanges between these Afroasiatic languages and Proto-Indo-Hittite (PIH) and Proto-Indo-European (PIE). The results of some of these exchanges can be seen not only in the lexicon but also in the morphology and basic structure of the whole Indo-European language family.

THE ORIGINS AND DIFFUSION OF INDO- HITTITE AND INDO-EUROPEAN

In the first half of the nineteenth century, romantic scholars who believed in the creative powers of cold and altitude maintained that Indo-European originated in the Himalayas or some other Asian mountain range. As the century wore on, this *Urheimat* shifted west, and it was generally agreed that PIE was first spoken by nomads somewhere to the north of the Black Sea. In the last fifty years, this *Urheimat* has been

generally identified with the so-called Kurgan culture (named after distinctive burial mounds) attested in this region in the Fourth and Third Millennia BCE. Possessors of this material culture appear to have spread west into Europe, southeast to Iran and India and south to the Balkans and Greece.

The general scheme of expansion from Central Asia or the steppes developed before the decipherment of Hittite. The ability to read Hittite led to the discovery that it was a “primitive” Indo-European language and the further recognition of a whole Anatolian linguistic family.

It is now generally agreed that Proto-Anatolian split from PIE before the latter disintegrated into its separate branches.¹ It is impossible, however, to tell the length of time between the two events, which could be anywhere from five hundred years to ten thousand. In any event, the difference is sufficient to cause most general linguists to make the distinction between Indo-European and the larger grouping Indo-Hittite.²

If, as most historical linguists suppose, not merely Indo-European but also Indo-Hittite began north of the Black Sea, how and when did speakers of the Anatolian languages enter Anatolia? The *terminus ante quem* is provided by early Hittite names in merchants’ reports from the Assyrian commercial colony at Karum Kanesh in central Anatolia around 2000 BCE.³ Some authorities argue that the migration of Anatolian speakers into Anatolia took place early in the Third Millennium and was associated with destructions of the period known as Early Bronze Age II.⁴ Others prefer a later part of the Third Millennium when, Mesopotamian sources indicate, barbarians invaded Anatolia.⁵ These invaders would seem much more likely to have been Phrygian and Proto-Armenian speakers, that is to say Indo-Europeans in the narrow sense.

The distinguished archaeologist James Mellaart has even suggested that the belt of destructions across northern Anatolia at the end of the twentieth century BCE recorded the arrival of the Hittites in central Anatolia.⁶ Early Hittite names attested to from before the destructions falsify this suggestion.

Difficulties arise with other relatively recent scenarios from the Third Millennium. For example, linking an arrival in Anatolia with the primary split in Indo-Hittite would force the later dispersal of Indo-European languages to the late Third Millennium or even the Second. This dating would be difficult to reconcile with the association of the spread of Indo-European languages with that of the so-called Kurgan material culture that is attested archaeologically in the Fourth Millennium.⁷ If “Anatolian”

speech only arrived in Anatolia at that time, it would also be difficult to explain the great and deep divisions among these languages, some already attested in the late Third and early Second Millennium BCE. They include not only the “central” Anatolian languages—Hittite, Luvian and Palaic—but also more remote ones—such as Lydian, Lycian and possibly even Carian and the Cretan language written in Linear A.⁸ It is even more difficult, if not impossible, to explain the extreme internal diversity of the Anatolian subfamily if it only disintegrated in the Third or even the late Fourth Millennium.⁹

An Anatolian origin for Indo-Hittite

A more attractive possibility for the family’s origin is the scheme mentioned in Chapter 2; it was proposed by Colin Renfrew and, in much more linguistic detail, by the Georgian and Russian linguists Thomas Gamkrelidze and Vjačeslav Ivanov. The scholars’ versions of the dispersal of Indo-European (I would prefer Indo-Hittite) are very different in two crucial respects: cause and date.

Renfrew associates the extension of Indo-Hittite with the spread of agriculture and, therefore, dates it to the Seventh Millennium BCE. He maintains that the language was already spoken in central Anatolia by the makers of the great Neolithic cultures there. When Renfrew proposed this the Neolithic was supposed to have begun in central Anatolia in the Seventh or Eighth Millennium BCE.¹⁰ It is now known to go back to the late Ninth.¹¹ The region was at the western end of the southwest Asian zone of agricultural domestication. Linguistically, the culture would seem, therefore, to be a descendent of both Euroasiatic and Nostratic. PIH was only one of a number of languages spoken in central and eastern Anatolia during this long period. Likely the Kartvelian (Georgian) family, a “sister” of Euroasiatic and Hurrian as well as the apparent isolate Hattic, greatly influenced Hittite and even provides it with its name. (The Hittites called themselves Nes and their language Nesili.)

By contrast, Gamkrelidze and Ivanov attribute the successful expansion of Indo-Hittite to the development of wheeled transport sometime before the beginning of the Third Millennium BCE.¹² They illustrate their contention with the argument that the reduplicated PIE word **k^{ho}ekk^{ho}lo* “wheel, circle” has parallels in the Sumerian *gigir*, the Semitic *gilgal/galgal*, and the Georgian *gorgal*, all with the same meaning. They maintain that the single root **k^{ho}el* from which the reduplication was made indicates

that the original form was Indo-European.¹³ They then argue, on the basis of archaeology, that the greatest concentrations of carts and chariots have not been found on the steppe where conventional Indo-Europeanists site the Indo-European *Urheimat* but in southwest Asia. (They do not mention that the concentration is in Mesopotamia not Anatolia.¹⁴) *K^{ho}ekk^{ho}lo is only one loan from Indo-Hittite to non-Indo-Hittite languages. These loans will be discussed in some detail in the second half of this chapter.

Another difference between Renfrew and Gamkrelidze and Ivanov is that while Renfrew sets the *Urheimat* of Indo-Hittite in the major Neolithic cluster in central Anatolia around Çatal Hüyük, Gamkrelidze and Ivanov see it as having been in eastern region of the peninsula.¹⁵ They then propose that the Anatolian (Hittite) family moved west to the center of the region.¹⁶ Armenians stayed in the homeland, while the Indo-Aryans and eastern Iranians moved east and south. The main body of Indo-Europeans, according to Gamkrelidze and Ivanov, moved east and then north, swinging east of the Caspian Sea to what the authors describe as a “secondary homeland” west of the Volga and north of the Black Sea (see Map 4). They correlate this secondary homeland with the Kurgan material culture of the steppe in the Fourth and Third Millennia BCE. From this region arose what they call the “Ancient European Dialect speakers” whose dispersal led to establishment of the branches of the Celtic, Italic, Illyrian, Germanic, Baltic and Slavic families.¹⁷

The two authors do not place Greek in this cluster. They see Greek as having been linked to Armenian and Indo-Aryan, in eastern Anatolia. Armenian remained in the homeland and Indo-Aryan moved east to Iran and eventually India. Meanwhile, Greek moved through the Anatolian speakers to the west coast and from there into the whole of the Aegean Basin. They back the hypothesis that Greek originated in eastern Anatolia by providing a number of Kartvelian etymologies.¹⁸

From the Aegean, Greek speakers moved northwards to meet those of the “Ancient European Dialects” who arrived from the north. Albanian and the dead language of Thracian were formed by this merger.¹⁹ Gamkrelidze and Ivanov maintain that the great Neolithic civilizations of the Balkans in the Sixth and Fifth Millennia BCE were non-Indo-European speakers later “submerged by migratory waves of Indo-European speakers.”²⁰

Linguistically, the clusters Gamkrelidze and Ivanov set out are plausible to most Indo-Europeanists. Specifically, most agree on the proposed

bundle of Greek, Armenian and Indo-Iranian in which, for instance, unlike other Indo-European languages, some past tenses were marked by a prefixed *e-*. In general, more isoglosses or similarities unite the three than occur with Greek and Italic, let alone between Greek and Slavic or Germanic.²¹

Even so, the historical and geographical scheme set out by Gamkrelidze and Ivanov is not necessarily the best way to explain the linguistic divisions. The authors are vague in their chronology: they merely claim that the Proto-Greeks moved through Anatolia and across the Aegean before 3000 BCE.²² This date makes it difficult to see how their speech could have retained its special relationship with Armenian and Indo-Aryan, while passing through regions in which Anatolian languages were spoken without being affected by them.

Colin Renfrew has linked the diffusion of Indo-Hittite with the spread of agriculture. As mentioned in Chapter 2, Renfrew has made a number of creative modifications to the views he set out on this subject, in his 1987 book.²³ On two issues, however, he has remained constant: (1) The *Urheimat* of Indo-Hittite was the agricultural “cradle” in central—not eastern—Anatolia. (2) Indo-Hittite, accompanied by agriculture, spread west from this *Urheimat* to the Aegean around 7000 BCE. According to him, Indo-Hittite speakers (now Indo-European speakers, after the split with the Anatolian branch) moved on to the Balkans to western Europe and east to the north of the Black Sea. Gamkrelidze and Ivanov and Renfrew all modify the traditional view that the Ukrainian Steppe was the Indo-European *Urheimat*. Nevertheless, Gamkrelidze and Ivanov call the region “the secondary homeland” and correlate it with the Kurgan culture.²⁴ Renfrew sees the steppes merely as the base from which the Indo-Aryan speakers moved southeast to Iran and India.²⁵

Renfrew has always emphasized what he saw as the continuity of culture in Greece since the arrival of agriculture in the Seventh Millennium. In this he was opposing his onetime fellow excavator, the Lithuanian archaeologist and polymath Marija Gimbutas. Gimbutas linked Indo-European expansion to that of the Kurgan culture, which, according to her, had covered the Balkans including northern Greece as well as much of central Europe.²⁶

Renfrew has argued that Indo-European spread into western Europe with agriculture, displacing the earlier languages of the hunters and gatherers there. Other archaeologists agree that there was no agricultural revolution in Europe and that agricultural techniques and pottery came

into central and western Europe in the Sixth Millennium BCE from the east. They are divided, however, as to whether this was the result of a migration or adaptations to the new technology made by the native peoples who had previously been Mesolithic gatherers.

Furthermore, non-Indo-European speakers have survived in western Europe into historic times. Basque, for instance, is still spoken today. Thus, the majority of scholars see the introduction of Indo-European languages to western Europe as coming after the spread of agriculture in a piecemeal process starting before 3000 BCE and continuing until the present.

An eclectic hypothesis

I see no reason why the hypotheses of Gamkrelidze and Ivanov, Renfrew and Gimbutas cannot be reconciled or fruitfully combined. We all accept the origin of Indo-Hittite in Anatolia, against the traditional vision of an *Urheimat* in the steppe. Where Gamkrelidze and Ivanov see “Greek” as having moved across the Aegean, however, I agree with Renfrew that the initial move was made much earlier with the spread of agriculture. I differ from Renfrew in seeing the migrants’ language not as Proto-Greek but as a branch of Indo-Hittite. Peoples speaking forms of this language spread north to create the Neolithic civilizations of the Sixth and Fifth Millennia BCE in the Balkans. Here I differ from Gamkrelidze, Ivanov and Gimbutas.

I then follow the scheme set out by W. H. Goodenough in 1970. He argued that people from these agricultural civilizations on the edge of the steppe developed techniques of nomadism. From this mixed agricultural and nomadic population that spoke Indo-Hittite the Kurgan culture formed and Indo-European, in the narrow sense, developed in the Fourth Millennium.²⁷ At this point, I accept the conventional view that the Kurgan culture and Indo-European languages spread out from the steppe. What Gamkrelidze and Ivanov call the Ancient European Dialects (Celtic, Italic, Illyrian, Germanic, Baltic Slavic and, probably, the Tocharian families) derived from northern dialects and migrated earlier, while the Indo-Aryan (Armenian and Greek) came from the southern.

It seems that Indo-Iranian speakers had penetrated Iran from the north by the end of the Third Millennium BCE. During the Second Millennium, they entered the Near East and conquered much of northern India. Already they appear to have been calling themselves Arya or Aryans.

Given the racist and anti-Semitic uses to which this name has been put, it is wonderfully ironic that the word “Aryan” has an Afroasiatic origin. It is a loan from Semitic into Indo-Iranian. In Ugaritic, the name ʾary was used as a gentilic (name of a people), but the word ʾary “companion” is clearly related to the Egyptian *iri* with the same meaning.²⁸ This relationship is only one of a number of linguistic indications that the Indo-Iranians were in close contact with Semitic-speaking peoples of Mesopotamia and Syria. The broad-minded Indo-Europeanist Oswald Szemerényi has argued plausibly that the reduction from the PIE five-vowel system (a,e,i,o,u) to a three-vowel system (a,i,u) in Indo-Iranian was the result of contact with speakers of Semitic with its three-vowel system.²⁹ As Szemerényi emphasizes, such a fundamental borrowing indicates very close contacts.

Proto-Greeks and Phrygians migrated through the Balkans with the Kurgan culture in the late Third or early Second Millennium BCE. The Greeks stopped short of Crete and the eastern Aegean, where Indo-Hittite languages survived for some centuries. The Phrygians moved on into northwestern Anatolia. The Proto-Armenians appear to have been moved by Uratian rulers from the region of Phrygia to their later homeland only in the seventh century BCE.³⁰ This model of PIE speakers living for a time in a secondary homeland in the steppes away from Anatolian speakers and in relatively close proximity to each other explains the complex ways in which the isoglosses within Indo-European intersect.³¹ Specifically, it resolves such “problems” seen by Gamkrelidze and Ivanov as the Balto-Slavic-Indo isoglosses, when, according to them these languages belonged to fundamentally different branches.³² This model also ties linguistic divergence of Indo-European with archaeological evidence from the Kurgan culture.

The spread of Indo-Hittite in eastern Europe was probably from Anatolia and appears to have followed the common pattern of linguistic expansion with the arrival of agriculture. On the other hand, the diffusion of Indo-European, in the narrow sense, was from the steppe north of the Black Sea and seems to have been the consequence of later conquests, migrations and cultural influences. These were possibly linked to the domestication of horses and the development of carts and, later, chariots.³³ This case makes it clear that one cannot find single explanations for widespread developments. One must always be alert to the possibility that similar changes may be the results of very different processes.

Linguistic borrowings indicating an Anatolian origin for Indo-European

Gamkrelidze and Ivanov reinforce their claims for an Anatolian *Urheimat* by listing what they see as striking parallels between PIH and languages known to have been in or near Anatolia. Their arguments on phonetics will be considered in Chapter 5. Here we shall look at some of the lexical items they consider to be loans into conventional PIE from other languages or language families. Gamkrelidze and Ivanov find one loan from Hattic *-prass-* into Hittite *pařšana* “leopard.” They point out the importance given to leopard cults at Çatal Hüyük, as well as elsewhere in central Anatolia.³⁴ This etymology is far from straightforward as *pařšana* has been plausibly linked to roots $\sqrt{\text{prs}}$, $\sqrt{\text{prd}}$ and $\sqrt{\text{prq}}$ in Indo-European and $\sqrt{\text{prq}}$ in Afroasiatic, all meaning “to tear, scratch.”³⁵ Gamkrelidze and Ivanov provide clearer examples of PIH loans into Hattic: the PIH roots $\sqrt{\text{wer}}$ “water” and $\sqrt{\text{ai}}$ “to give, take” appear in Hattic.³⁶

Gamkrelidze and Ivanov also claim PIH loans into Elamite; one of these *ta* “to put, place, stand” fits the PIE $*d^{[h]}eH$ very well. They also derive the Elamite *luk* “fire” from PIE $*l(e)uk^h$.³⁷ This, however, could equally come from a (pre-)Proto-Nostratic root (if Elamite is a Dravidian language, it belongs to the larger family). Bomhard and Kerns subsume the PIH $*lew-k^{[h]}$ under a Proto-Nostratic root $*law-/lew$ “shine.” They refer to Afroasiatic forms with final *-h*. They do not, however, mention the Egyptian *rqh* “light, fire” (generally rendered *rōkh* or *rokh* in Coptic). This form indicates two possibilities: (1) that forms with a final */kh/* existed in Proto-Nostratic outside PIH and (2) that the Elamite word could be a loan from Afroasiatic. Similarly, Gamkrelidze and Ivanov provide an etymology for the Elamite *pari* “go on a campaign, march” from the PIH $*p^h\text{or}H$.³⁸ This word seems ultimately related to the Proto-Nostratic root $*\sqrt{p^h}ir$, “to bear, bring forth”; the Egyptian *pri*, Coptic *peire* “to go, come out” is even closer.³⁹ Other Egyptian counterparts include *pri* in the sense of “to mount,” *pri* “ritual procession” (these are also used for the rising of Sothis/Sirius) and *prw* “procession” or “land emerging from the inundation.”

Pari/e is only one of the PIH loans into Hurrian and its later form Uartian, proposed by Gamkrelidze and Ivanov. As these languages are always seen as northeast Caucasian and Nadene, there can be no shared Nostratic roots. On the other hand, if there are parallels with PIH we cannot be sure from which branch of Nostratic they came. For instance,

where Gamkrelidze and Ivanov derive the Hurrian *ass-* from the PIH **es* “to sit,” Bomhard and Kerns see a Proto-Nostratic root **asʸ* / **esʸ* “to put, place, be seated.” There are the Egyptian *ist* and the Sumerian *as-te* and *es-de* “seat, throne.”⁴⁰ The Hurrian form could well be a borrowing from the latter. Similarly, where Gamkrelidze and Ivanov claim that the Hurrian-Urartian *ag-* comes from the PIH **√ak* “to lead,” the root is seen by Bomhard and Kerns as Nostratic attested in both PIH and Proto-Afroasiatic.⁴¹ Therefore, the Hurrian form could also come from Semitic. The same is true of Gamkrelidze and Ivanov’s major claim that the Hattic *kait* “grain” and the Hurrian *Kad/te* “barley grain” derive from the PIH **Hat* > “grain.” Thus, they argue, “The presence of a common word for grain in Proto-Indo-European, Hattic and Hurrian would be consistent with the claim that agriculture and the cultivation of particular grains developed in the range of Proto-Indo-European, Hattic and Hurrian.”⁴²

The archaeological arguments in favor of multiple domestications of grains, including barley, were discussed in the last chapter.⁴³ Even the lexical root itself presents problems for their argument. Dolgopolsky has proposed a Nostratic root **√χänt* “kernel, grain” found in Afroasiatic and Dravidian.⁴⁴ Bomhard rejects this proposal forcefully.⁴⁵ Nevertheless, a Semitic, or rather a Proto-Afroasiatic root **ħint* (which Gamkrelidze and Ivanov see elsewhere as the origin of the PIE **Hand*^[h] “edible plant”) doubtless exists.⁴⁶ However, **ħint* became *ħnt* in Ugaritic and Hebrew, a change that indicates assimilation of the /n/ (a similar process also took place in many Highland East Cushitic languages).⁴⁷ Such forms could have been loaned into PIH or could have developed independently within it. Given the possible Nostratic root and the even more likely possibility that the Anatolian forms were borrowed from neighboring Semitic forms, there is no reason to believe that the cultivation of grains in general, and barley in particular, began in southwest Asia rather than farther south.

LOANS FROM OTHER LANGUAGES INTO PIH

While there are problems with some of the loans Gamkrelidze and Ivanov propose to and from PIH, Hattic, Hurrian and Elamite, their argument for an Anatolian origin of PIH has other supports. They provide a number of what they believe to be Kartvelian loans into PIH. The Kartvelian, or Georgian, language family was spoken in the southwest Caucasus

and eastern Anatolia. Greenberg excluded Kartvelian from Euroasiatic, although he was willing to see it as in a larger Nostratic. He also followed the Czech linguist Václav Blažek in seeing a large number of cognates between Kartvelian and Afroasiatic.⁴⁸ Gamkrelidze and Ivanov provide twenty examples of Kartvelian cognates with PIH which they see as being borrowed from PIH into Kartvelian. Dolgopolsky and Bomhard, each, see one word (but different words) as deriving from Nostratic.⁴⁹ The Indo-Europeanist J. P. Mallory believes that the parallels may have such a genetic origin.⁵⁰ Nevertheless, some could well be loans, thus strengthening the case of Gamkrelidze and Ivanov for an Anatolian origin for PIE or, rather, PIH.⁵¹

Gamkrelidze and Ivanov also support their argument for an Anatolian *Urheimat* for PIH with what they see as the Egyptian origin of the PIH *b[h]ei “bee” from *bit*. This may be so, but the greater likelihood of its being a Nostratic or even Proto-World root will be considered below. Another possible loan from Egyptian into PIE, not mentioned by Gamkrelidze and Ivanov, is the root *√k[h]alp for the related concepts “to hide, steal.” Bomhard sees a Nostratic root *√k[h]alʷ / *k[h]əʷ for these meanings attested in Indo-European and Dravidian.⁵² This root as *kir also exists in Afroasiatic.⁵³ All the Indo-European forms, however, end with a -p, forming a root *klep. This would seem cognate to the Egyptian *k3p* “to cover, hide.”⁵⁴

Gamkrelidze and Ivanov also propose some Sumerian loans into PIH. Two of these are connected with agriculture. The first they see is the Sumerian *agar* “irrigated territory, grainfield” as the etymon for the PIH *akro “acre, field.” This word could have come through borrowing from Sumerian of the North Semitic >ikkār “laborer, peasant, cultivate.” The Sumerian word is, however, closer to the PIH root semantically.⁵⁵

The second borrowing is still more complicated. Gamkrelidze and Ivanov see PIH *k<ou “bull, cow” as coming from the Sumerian *Nu[d] (= *gud*, *gu*) and possibly the Egyptian *ng3w* “longhorned bull” sometimes shortened to *ng* or *gw*. Bomhard and Kerns identify the same root but claim it as Nostratic on the basis of the Sumerian, and a Dravidian, parallel. They do not mention the Egyptian forms.⁵⁶ Gamkrelidze and Ivanov claim that the sequence of the velar nasal /n/ and a pharyngeal in Egyptian is comparable to the glottalized labiovelar in Indo-European. They associate these forms with the “Old Chinese” *<kuo and *ngiɕu.⁵⁷ They then link these to Altaic forms and go on to claim once again that

“The agreement among various forms of linguistic evidence for terms for ‘wild bull’ and ‘domesticated bull’ pinpoints the Near East as the area of the first acquaintance with the wild and the domestic bull.”⁵⁸

As shown in the last chapter, there were at least three distinct domestications of cattle, two in Asia and another in Africa.⁵⁹ The Egyptian *ngʒw* may be the result of the merging of different words for cattle. Thus it is puzzling and interesting that these components have possible African, as well as Asian, connections. Orel and Stolbova propose an Afroasiatic root *gar “calf, bull” that would provide an equally good cognate for *ngʒw* as *Nu[d] (= *gud*, *gu*).⁶⁰ The possibly related form *gw* can be placed in another Afroasiatic cluster *gaw also attested in Berber, East Chadic, and Omotic.

Finally there is the initial *ng*. The chief Proto-Afroasiatic root for bovine is **la*. The basic root in Niger-Congo is **na* which may or may not be related to *la*.⁶¹ The possibility of an extension with a final -g is suggested by the Wolof- *nag* “cow.”⁶² Wolof belongs to the Atlantic branch of Niger-Congo. In the archaic Bantu language Basa, spoken in Cameroon, the word is *nyàga*.⁶³ Orel and Stolbova place the Egyptian *ngʒ* under a root *nag[i]H in which they also place the Arabic *najat* “sheep” and the West Chadic *nungi “cow.”⁶⁴ They are uncertain about the West Chadic because the word could have been borrowed from *nage*, the equivalent word in Fulbe, the language of the Fulani and another Atlantic language.⁶⁵ Takács does not list *ng* or *ngaw* among possible loans into Egyptian from non-Afroasiatic languages. Nevertheless, here too an African connection may appear.

Gamkrelidze and Ivanov also propose two etymologies that suggest some Sumerian metallurgy was introduced to PIH speakers. The first is PIH *r(e)ud[^h] “red, copper, ore” from the Sumerian *urudu*. They claim convincingly that metal names often came from color terms. In this connection, it is interesting to note that in a bilingual vocabulary the Eblaite gloss on the Sumerian *urudu* was *kàpálu/ kàpáru*.⁶⁶ This is clearly derived from the West Semitic √kpr, a root with many meanings. One is found in the Hebrew *kōp(p)er* “henna” used for red dye.⁶⁷ If *kōp(p)er* “red” also meant “copper,” Kypros/Cyprus seems to be a West Semitic name for the island famous for its copper, rather than the toponym originating the metal name found in the Latin *cuprum* etc.⁶⁸

The second etymology proposed by Gamkrelidze and Ivanov is the metal name PIE *(a)wes(k^h) “gold” from the Sumerian *guskin* “gold.” The PIE form may be shaky but their argument that names for gold, the first

metal humans worked, are often used for copper and other metals is plausible.⁶⁹ These forms indicate both that the speakers of PIH did know about the soft metals and that they learned about them from Sumerians.⁷⁰

Loans between PIH/PIE and Semitic

The most impressive group of loans to PIH, according to Gamkrelidze and Ivanov, are those from Semitic. It is not surprising, given the origins of their discipline that most Indo-Europeanists vehemently oppose the idea of these loans.⁷¹ Gamkrelidze and Ivanov's proposals include the following:

PIE *t^[h]auro. “bull” from the Semitic $\sqrt{tawr}$. This etymology has been proposed at least since the work of August Friedrich Pott in 1836.⁷² Its absence from Hittite does not tie the loan to Anatolia, though contact with Semitic speakers would have been more likely there than with a PIH north of the Black Sea. The root's absence from other branches of Afroasiatic makes the direction of the loan uncertain. Gamkrelidze and Ivanov follow conventional wisdom and argue for Semitic into Indo-European on the basis of root structure and the expectation that an Indo-European *t^h would have been rendered *t^h rather than interdental *t̪.⁷³ This argument is not altogether convincing as what is reconstructed as a Proto-Semitic interdental *t̪ by some scholars is seen by others as a voiceless aspirate *t^h.⁷⁴

PIH *G^[h]ait'. “kid, goat.” Gamkrelidze and Ivanov point out that this form occurs in only two branches of Indo-European, Italic and Germanic. As these subfamilies are extremely ancient and located far from southwest Asia, the word points to a loan from Semitic into PIE. Dolgopolsky claims it for Nostratic and gives parallels not only from other Afroasiatic terms but also from Dravidian.⁷⁵ Bomhard, however, does not list it. Orel and Stolbova do not view this as an Afroasiatic root. David Cohen, however, lists *gady “kid” as a common Semitic root and Saul Levin sees the connection between *G^[h]ait' and the Semitic forms.⁷⁶ Levin also cites the Chinese scholar Tsung-tung Chang who claims that the Archaic Chinese for goat was *kât (the modern *jie*).⁷⁷ Chang's belief that it is a loan from Indo-European seems more plausible than that the parallel is a random coincidence or Proto-World. It has not, so far, been identified in any Tocharian language but if *kat, rather than *ziang (yang),

was the principle name for goat, the archaeological evidence of this early presence of goats *circa* 6000 BP would suggest an early expansion of Indo-Europeans.⁷⁸ All in all, it would seem that PIH *G^hait' is probably a loan into PIH from Semitic, although it could be a shared Nostratic root for wild, not domestic, goat.

PIE *ag^[ho]no. "lamb, small sheep," Semitic *igl "young animal." The Gereẓ form *ḡ^wl* is even closer.⁷⁹ Neither Dolgopolsky nor Bomhard and Kerns see it as Nostratic, but *ḡ^{igal} "cow, calf" is a clear Afroasiatic root and there seems little doubt that it was loaned from Semitic to PIE not vice versa.⁸⁰ Gamkrelidze and Ivanov explain the Indo-European /n/ rather than /l/ as the result of the existence of "a large Indo-European class of domesticated animals with *-n-."⁸¹ I find it simpler to believe that Indo-European preserved the original sound, as in the case of the prepositions referred to in Chapter 2.⁸²

PIE *q^{he}/op^h. "monkey, ape." This form is found throughout Semitic as *qop and in Egyptian as *gi/wf*. Gamkrelidze and Ivanov have plausibly postulated that a voiceless aspirated stop in PIE could give rise to initial /k-/ or /ø/ from the Sanskrit *kāpi* and the Greek *kēbos* to the Icelandic *api* and the English "ape." The two authors explain the variations as postvelar glottalized stops *q. The proposal that they derive from postvelar emphatic stops (not necessarily glottalic) is convincing, even though the alternations q/ø are not regular in the different daughter languages.⁸³

PIH *b^[h]ar. "grain, groats." Gamkrelidze and Ivanov claim that this must be a borrowing because of the rare /a/ root vocalism. There is no doubt that $\sqrt{\text{bar}}/\sqrt{\text{bur}}$ is widespread not only in Semitic, as they claim, but throughout Afroasiatic.⁸⁴ Bomhard and Kerns, however, see *bar/bər* as Nostratic found also in Dravidian and Sumerian.⁸⁵ This weakens, although it does not destroy, the view of Gamkrelidze and Ivanov that *b^[h]ar is a loan from Semitic into PIH.

PIE *d^[h]oHnā. "grain, bread." This root is only found in Indo-Aryan Baltic and Tocharian. The root *du^hn "millet" appears to be limited to Semitic.⁸⁶ Gamkrelidze and Ivanov find the shift Proto-Semitic /ḡ/ to PIH laryngeal H easier than the other way around.⁸⁷

PIE *Hand[h]. “edible plant.” Gamkrelidze and Ivanov see this in the Sanskrit *ándha* “plant from which the sacred soma was made,” the Greek *ánthos* “flower” and the Armenian *and* “field.” They derive this form from the Semitic *ḥint “wheat grains.”⁸⁸ The early twentieth century lexicographer of Indo-European Julius Pokorny sees a root *andh with the same word collection together with the Tocharian *ant(e)* “plain.” While the Armenian and Tocharian forms may well be related, I shall argue in Chapter 10 that it is much more plausible to derive the Greek *ánthos* “vegetable, life force” from the Egyptian *nṯr* “vegetable, life force” than from a PIE etymon.⁸⁹

PIH *k’oern. “millstone.” The parallels of this word with the Semitic root √gurn- have been observed at least since Hermann Möller wrote in 1911.⁹⁰ It has not so far been found in any other branch of Afroasiatic. Bomhard and Kerns, who propose a Nostratic root, link *Gar-*Gər?- to Kartvelian and Dravidian as well as to the Indo-Hittite *g^her, *g^hor, from which come “grind” etc.⁹¹ Bomhard and Kerns disagree with Gamkrelidze and Ivanov and link “quern” not to *gurn but to another Nostratic root *k’w^{ur}-/*k’w^{or}- “to crush, grind,” which has no Afroasiatic forms.⁹² Given the uncertainty on the voicing of emphatic consonants, I think that Bomhard and Kerns were too rigid here. Moreover, given the semantic identity, there is certainly a relationship between *k’w^{ur}-/*k’w^{or}- and *Gar-*Gər-. The difficulty Bomhard and Kerns have in relating the Semitic to the PIE initial consonant genetically would be eased by proposing, as Gamkrelidze and Ivanov have done, a loan from Semitic into PIH.⁹³

PIE *Med[h]u. “honey, beverage made from honey, mead.” Gamkrelidze and Ivanov propose this as a loan from the Semitic root √mtq. Their reasoning is that reduction of complexity is generally more common than the reverse and the root is attested only as a noun in Indo-European but as both a noun and a verb in Semitic. They, thus, see the loan as originating from Semitic.⁹⁴

The root is, in fact, much more widely attested than merely in Indo-European and Semitic. Some of the clearest common roots in Nostratic are those dealing with honey. The stems *mit and *bit “bees” and their product *mel “honey” are found throughout Afroasiatic.⁹⁵ The roots *mit and *bit are also found beyond Nostratic. The reconstructed Chinese

word for bee and honey is *mīčt.⁹⁶ This could be a loan from Indo-European, although that is unlikely. Théophil Obenga, the Congolese specialist in African languages, has also pointed to apparent Niger-Congo parallels.⁹⁷ Lionel Bender sees a root *bim, *bi or *mbe “bee, honey” in Proto-Nilo-Saharan.⁹⁸ Similar forms even exist in Polynesian.⁹⁹ Thus, there is a possibility that the roots of these forms may be Proto-World. Certainly, hunters and gatherers enjoy honey.

PIH *P[h]elek[h]u-. “ax, poleax.” Since the decipherment of cuneiform in the mid-nineteenth century, scholars have been struck by the resemblance between the Greek *pélekus* found in Homer and the Akkadian *pilaqu* both meaning “ax.”¹⁰⁰ They also knew that *pélekus*, although with an unusual form for Indo-European, had a regularly derived cognate in the Sanskrit *parasú*. In addition, they realized that the Semitic roots $\sqrt{\text{plq}}$ and $\sqrt{\text{plg}}$, with meanings of “cleave” and “cleaver” were widespread.¹⁰¹ Therefore, they found it impossible to link *pilaqu* with *pélekus*. Gamkrildze and Ivanov’s solution to the riddle is to propose, convincingly, that the loan was made from Semitic when the Greek and Indo-Aryan branches of Indo-European were still united. The process must have taken place early before Indo-Aryan went through the satem shift from palatal k^[h]y > s.¹⁰²

PIE *Sek[h]ūr-. “ax, poleax.” Gamkrelidze and Ivanov see a loan from a Semitic root attested in the Akkadian *sukurru* “javelin” and the Hebrew *segor* “ax” to the Latin *secūris* and the Old Church Slavonic *sekyra* “ax.” The fact that these two languages are in what the authors describe as Ancient European Dialects convinces them that the form is an early loan.¹⁰³

There are, however, some difficulties with this scheme. First, the word *ságaris* (5) “ax” is found in Greek and like almost all words in Greek with initial s-, is clearly a loan word. Since it is associated with Scythes and Persians, the word is supposed to come from one of these languages, but no trace of it has been found in Indo-Aryan. *Ságaris* is also widely thought to be the origin of the Hebrew *səgor*, “battle ax.”¹⁰⁴ The Semitic root $\sqrt{\text{sgr}}$ is “to shut, close, imprison.” The word *səgôr* means “to enclose, encase.” The Latin *secūrus* is generally thought to derive from the Indo-European root *sek “cut” and could be a development of the Indo-European root *sek “cut” and *cūra* “cut off from care.” This charming

and ancient explanation is clearly a folk etymology. A loan from the Canaanite (probably Punic) *səgôr* or the passive participle of $\sqrt{\text{sgr}}$, *sāgur*/*sākur* is much more likely. The alternation *sgr*/*skr* is found in both Hebrew and Phoenician.

PIE $\text{K}^{[\text{h}]}\text{laHw-}$ “lock, close: key.” Gamkrelidze and Ivanov derive this from a Semitic root *k-l “to hold back, restrain, lock.” Bomhard and Kerns, however, postulate $\text{*k}^{\text{h}}\text{al-}\text{*k}^{\text{h}}\text{əl}$ “to guard, hold back, watch” as a Nostratic root, even though the only form they can find outside Indo-European and Semitic is the Sumerian *kal* “hold, keep, retain.”¹⁰⁵ This could easily be derived from the Akkadian *kalû*.

PIE *naHw- “ship, vessel.” In this case Gamkrelidze and Ivanov have been ingenious or far-fetched. They derive *naHw- from the Semitic root $\text{*}^{\text{u}}\text{nw(at)}$ “vessel.” The derivation requires a metathesis of the initial *^{u} - and the laryngeal lengthens the root vowel. Bomhard and Kern give a Nostratic etymology for what they describe as the PIE *neʃh- (glottal fricative) *noʃh “sail, ship.” They emphasize the process and link it to the Afroasiatic $\text{*neʃ-}/\text{*nəʃ}$ “to come, go, arrive, travel, sail” in particular the Egyptian *nʾi* Coptic *na* “to travel by boat.”¹⁰⁶ There is also the similar form *nyw* “pot, vessel,” which may be related.¹⁰⁷ Either a common Nostratic root or a borrowing into PIE from Egyptian would seem more plausible than Gamkrelidze and Ivanov’s Semitic derivation.

PIE $\text{*k}^{[\text{h}o]}\text{r(e)i-}$ “buy, trade, barter.” Early in the twentieth century, Herman Möller proposed deriving this root from the Semitic *kri .¹⁰⁸ It fits well in both its phonetics and its semantics.

PIE $\text{*t}^{\text{a}}\text{p}^{[\text{h}]}$ “sacrifice.” This root is found widely both in Indo-European, from Latin to Tocharian, and in Semitic. Gamkrelidze and Ivanov’s proposal here is plausible, although it may at times have been confused with a Nostratic root $\text{*t}^{[\text{h}]}\text{ap}^{[\text{h}]}$ “fire, burn.”¹⁰⁹

PIE $\text{*Hast}^{[\text{h}]}\text{er-}$ “star” and the Semitic $\text{*t}^{\text{t}}\text{tar}$ “deified star, planet Venus.” While these forms are clearly related, the nature of that relationship is not at all obvious. Gamkrelidze and Ivanov contradict themselves here. They first argue that the loan was from Semitic to

Indo-European as the initial **ayin* in Semitic corresponds to the Indo-Hittite, laryngeal H. They further add that, very much as in Semitic languages, in Indo-European an interdental spirant /t̪/ produced an /s/ or ø in different branches.¹¹⁰ In a footnote, however, the authors argue for a loan from Indo-Hittite into Semitic on the grounds that the elements in **Hast^[h]er* can be explained within Indo-Hittite while those in **ttar* cannot.¹¹¹ On the other hand, John Pairman Brown argues that **ttar* was derived from the Sumero-Akkadian name of the goddess *Ištar*. He then suggests that this form itself may be “a very old loan from the Indo-European for “star.”¹¹² Whichever the direction, the relationship between the two roots indicates close contacts between early Indo-Hittite and Semitic speakers.

PIE **Sep^[h]t^[h]m*. “seven.” Gamkrelidze and Ivanov, following a tradition going back to Möller and beyond, derive from the Semitic **sab^c* feminine **sab^c* -at.¹¹³ They argue that “borrowing of numerals especially those higher than five is a widespread phenomenon attested in many languages and can be explained by particularly close contact and cultural interaction.” They also see Proto-Kartvelian as having borrowed the Semitic feminine form to form **swid*.¹¹⁴

Gamkrelidze and Ivanov do not take up Möller’s parallel etymology from Semitic: that of the Indo-European root he refers to as **s-g-* “six.”¹¹⁵ Pokorny describes the root uncertainly as **sueks*, **sek^hs*, **kseks*, **ksueks*, *ueks* or *uk^hs*.¹¹⁶ The Sanskrit form is *xát* but the Avestan is *xsvas*. The initial cluster *xsv* is unparalleled in Indo-European. This suggests a loan but from what Semitic form? The situation is further complicated by the medial -d- found for “six” in the masculine in Ge’ez and other Ethiopic languages. Akkadian and Hebrew have forms based on s--s/t. The conventional explanation is that the Semitic root is **sds*, but this was dropped in the southwest Asian languages.¹¹⁷ Saul Levin uses Egyptian forms *sis* or *ssw* to postulate that the Afroasiatic root was **SeCS* (S standing for a sibilant or related fricative and CS for an unspecified consonant). He goes on to argue that the medial -d- was inserted to avoid the confusing sibilants. He also insists on the importance of the linked numbers six and seven in Mesopotamian and western Semitic culture. There were for instance, the seven visible planets, leading to the days of the week, the seven days of creation and resting after the sixth day, not to mention the sexagesimal system.¹¹⁸

PIE $K^{[h]}r-n$. and the Semitic *qarn “horn.” Finally, Gamkrelidze and Ivanov take up this example. The Indo-Europeanist Alan Nussbaum devotes his book *Head and Horn in Indo-European* to this term.¹¹⁹ It is a significant indicator of Nussbaum’s cultural blinkers, as well as those of his teachers, colleagues and referees, that in this study of the Indo-European root * $k^{[h]}er$ “head” and * $k^{[h]}r-n$ “horn” he does not mention, let alone discuss, the fact that the Semitic root for “horn” is *qarn.

Gamkrelidze and Ivanov maintain that the loan is from PIE to Semitic not the other way around.¹²⁰ They argue for this direction because ** $k^{[h]}r-n$ derives from a root * $k^{[h]}r$ “top, head,” lacking in Afroasiatic. Saul Levin, too, argues that *qarn is a loan from Indo-European into Semitic on the grounds that it is unattested elsewhere in Afroasiatic.¹²¹ Egyptian, however, has the words *q3* “be high” *q33* “hill,” which have cognates in Berber, Semitic, and Lowland East Cushitic.¹²² Orel and Stolbova see parallels to the Semitic *qarn in the Late Egyptian *qrty* “two horns” and the Omotic *gar* “horn.”¹²³ Whatever, the direction of borrowing, the striking similarity of the two roots indicates close contacts between Semitic and PIE speakers.

Hittite Šall-i-. “royal” Akkadian **šarr-um** “king.” That this crucial term should have been borrowed from Akkadian is important but not surprising, given the contacts known to have taken place between Akkadian-speaking Assyrian merchants and Hittite speakers around 2000 BCE. Probably these contacts occurred much earlier.¹²⁴

To conclude this section, Gamkrelidze and Ivanov have produced or repeated a number of significant lexical exchanges between PIH-PIE and many southwest Asian languages. Some of the etymologies seem unlikely; others are as well or better explained by derivations from common roots in Nostratic rather than from loans. Nevertheless, a substantial core remains, especially of loans from Semitic. Unless a loan is attested in both Anatolian and PIE, however, it cannot be used as evidence that Anatolia was the Indo-Hittite *Urheimat*. Sufficient other evidence in favor of this *Urheimat* exists elsewhere. In fact, very few of Gamkrelidze and Ivanov’s proposals can jump this double hurdle. Nevertheless, the lexical exchanges and the evidence of morphological and structural loans from Semitic into PIE, which I hope to show below, indicate very close relationships between Semitic and PIE speakers, particularly just before the breakup of PIE in the Fourth Millennium BCE.

*Beyond words: Further borrowings between
Afroasiatic and Indo-Hittite*

Any aspect of one language can be transferred to another. Generally, however, there is a hierarchy in borrowing: The easiest to borrow are content words, chiefly nouns. Then comes the transfer of functional words, conjunctions and adverbial particles. With more intense contact one can find prepositions and postpositions; this involves some structural changes. Beyond that with strong cultural pressure more or less significant structural modification can occur.¹²⁵ When looking at relations between Afroasiatic and PIH, the observer may find it difficult to distinguish these more fundamental exchanges from shared derivations from Nostratic. For instance, while the negation /n/ is common throughout Nostratic, the prepositions *en “in,” *an “on,” and *ad “to” (referred to in Chapter 2) are only attested in PIE and Afroasiatic.¹²⁶ Thus, they could either be forms common to Nostratic that have dropped out of other branches or they could be loans, probably from Semitic to PIE.

A morphological feature with a similar ambiguity is the ending /-ī/ used in Indo-European with both active and inactive nouns with the general sense “of pertaining to” and used later for the genitive or locative. This appears in other Euroasiatic languages, such as Ainu, Aleut, Inuit and, possibly, Chukchi and Korean.¹²⁷ The parallels with Indo-European Afroasiatic, however, are even more striking. The so-called *nisba* form /-ī/ “belonging to” or “the one who” is found in both Egyptian and Semitic: see such contemporary forms as Iraqi, Baghdadi, Jordani, Israeli. In Proto-Semitic, too, the *nisba* is associated with the genitive ending found in Eblaite, Akkadian and Arabic and is the same as that in PIE, *-i*.¹²⁸ Thus, these correspondences, like those of the prepositions, indicate either a Nostratic root or an Afroasiatic loan into PIE or both.

DEVELOPMENT OF AN INDO-EUROPEAN
GENDER SYSTEM BASED ON SEX

The “borrowing” of an organizational system as fundamental as gender requires not only close contact between speakers of the two languages but also existing exchanges of vocabulary and other grammatical features. In Chapter 3, I considered the possibility that the Afroasiatic binary sexual gender system was derived from Khoisan. In that case dealing with the very distant past and since we have little knowledge of East

African Khoisan, it is only possible to find a few lexical borrowings. In the case of Afroasiatic, or specifically Semitic and PIE, as suggested above, we have more evidence.

According to the conventional definition, “genders are classes of nouns reflected in the behavior of associated words.”¹²⁹ By this definition, gender is extremely common among the world’s languages. Here, however, I am concerned with the limited subsets of binary systems reflecting the oppositions animate-inanimate and masculine-feminine, which are considerably less frequent.

Although a sex-gender system is found in every branch of Indo-European (in the narrow sense), the system provides two interesting problems.¹³⁰ First, Indo-European is the only Euroasiatic language in which sex-based gender occurs and, second, linguists generally agree that the system is not primary to Indo-European. Like some other languages, PIE had a predisposition for binary structures. In this case, the major one was between “active” and “inactive” nouns. There were also verb doublets to match these categories.¹³¹ The inactive nouns were marked with “-om” and the active with nothing or, later, with a final -s or -os. Plurals of active nouns were formed with an additional -s. The inactive nouns were not considered to have plurals; therefore, they required verbs in the singular. Sometimes, however, they were considered to have mass, which was marked with *-ā.¹³²

This much is generally agreed. How these endings became attached to the feminine gender is, however, hotly disputed. In 1906 the Neo-Grammarian Karl Brugmann argued that after some semantic shifts “had caused no more than two or three /ā/ abstracts or collectives and $\bar{i}/ya-$ or $\bar{i}/\bar{i}\bar{i}$ stems or forms to refer to females, the analogical attraction of this handful of forms was sufficient to draw the bulk of words denoting females into what came to be the distinctive feminine classes.”¹³³ Brugmann implied that the common Indo-European word *g^henā (*k^wenā) “woman” was originally an abstract word for “bearing, parturition.” Thus, it had the abstract plural suffix -ā.¹³⁴ On equally flimsy grounds, he suggested that the PIE *ek^ha (*ek^{ho}ā) “*can have meant originally* a drove of horses” [my italics]. These two examples provided his grounds for the semantic shift that led to the establishment of a feminine gender with the final -ā.¹³⁵ Brugmann’s hypothesis was greatly strengthened by the decipherment of Hittite. In the first place, no obvious gender system was found in the language and, second, vowel lengthenings were explained by actual

laryngeals in Hittite that had disappeared in Indo-European. Therefore, conventional Indo-Europeanists have always celebrated Brugmann's discovery.¹³⁶ Paul Brosman, the linguist whose work on this topic Gamkrelidze and Ivanov follow, accepts Brugmann's general hypothesis but no longer maintains that the final *-ā* in **kʷenā* derived from an abstract plural. Instead he sees the coding simply as a coincidence that helped the shift.¹³⁷

In the years that followed Brugmann's work, a number of linguists dismissed his proposal as implausible.¹³⁸ The only alternative was provided by the French Indo-Europeanists Antoine Meillet and André Martinet who saw the distinction between male and female as having begun with the demonstratives **so* and **sā*.¹³⁹ Others came up with still less-likely explanations. For instance, the German historical linguist Götz Weinold proposed that the three-way distinctions of masculine-feminine-neuter was a natural development corresponding to what he saw as the triadic structure of Indo-European society as a whole, so beloved by Dumézil and other Aryanist mystics.¹⁴⁰

In 1975 the American linguist Rocky Miranda revived Brugmann's original hypothesis by providing what he saw as a parallel example of one word having created a whole new gender. According to Miranda, the Indo-Aryan language of Konkani, spoken around Goa on the west coast of India, went through a major structural change when the word *čedu* "child," but primarily "little girl," was reclassified from neuter to a new form of feminine. This change affected the whole system and "the neuter gender became a second feminine gender."¹⁴¹ This gender bending is not as drastic a change as the Indo-European transformation from a two gender system of active-inactive to a triadic masculine-feminine-neuter. Nevertheless, it does illustrate the possible attractive power of a single central word. Paul Brosman uses Miranda's work to buttress his modified restatement of Brugmann's views.¹⁴²

Others remain skeptical. Szemerényi, for instance, argues convincingly that the long vowels in PIE should not be derived from lost laryngeals unless the latter are attested in Hittite, which they are not in the collective or neuter plural forms.¹⁴³ He also questions the general assumption that Hittite lacked a feminine gender.¹⁴⁴ Specifically, he argues that the PIE root on which Brugmann based his hypothesis—**kʷenā*—was originally **gʷen* (**kʷen*) and that the final *-a* was already a feminine suffix.¹⁴⁵

A Semitic origin for Indo-Hittite gender

In all the convoluted arguments regarding gender no Indo-Europeanist has, to my knowledge, looked beyond the Indo-European family. Given what we know about lexical exchange and the possibility of grammatical influences, it would seem worthwhile to consider the likelihood of an Afroasiatic explanation for the rise of the Indo-European feminine gender. As stated in the last chapter, almost every branch of Afroasiatic is organized on the basis of a strict distinction between male and female gender. Given the contacts between speakers of North Afroasiatic and those of Indo-Hittite—which are indicated by archaeology, lexical borrowings and mere geographical proximity—some Indo-Hittite speakers undoubtedly know about the principle of sex-based gender.

In 1959, Istvan Fodor made the important point that an organizational principle of sex gender is not the same as the suffixes marking gender that appear in many genderless languages.¹⁴⁶ In this case, however, the two coincide and the similarity of the phonetic markers in Afroasiatic and Indo-European reinforces the idea that the central structural principle was borrowed.

The feminine marker *-t (not found in Khoisan) appears in Semitic, Egyptian, Cushitic, Chadic, Berber and, in some instances, Omotic.¹⁴⁷ The vocalization of the suffix is less secure but in Semitic and Egyptian, the two language families for which there is ancient attestation and with which PIE speakers are likely to have contact, the predominant form is *-at in the singular and *-āt in the plural.¹⁴⁸ The Egyptologist and linguist Antonio Loprieno views the overall situation of feminine markers in Egyptian in the singular as -at after consonantal and A-stems, as -ūt after U-stems and -īt after I-stems.¹⁴⁹ In Akkadian in the normal state, the suffix was -at-(um) or -t-(um) and in the plural it was always -āt. In the absolute state, it was -at in the singular and -ā in the plural.¹⁵⁰

As mentioned above, since the nineteenth century linguists have associated development of the feminine -ā or ī in Indo-European with the neuter plural or abstract -a. It is just possible that this neuter plural was also borrowed from Semitic. In Akkadian, abstracts were formed with the suffix -ūt.¹⁵¹ According to Loprieno, the similar Egyptian suffix -wt was “morphologically feminine but applied to masculine nouns is often used in the formation of collectives.”¹⁵² The Egyptologist Jean Vergote saw the Middle Egyptian -wt as having two different meanings, which he

reconstructed from Coptic: the first *-ūwat included “true collective nouns”; the second *-āwat “is generally considered a category of abstract nouns.”¹⁵³ It is not clear whether these reconstructions of the Egyptian -wt can be applied to the Akkadian -ūt. Nevertheless, the inaccuracy of early cuneiform makes such an idea quite possible. In Sumerian, for which the script appears to have been designed, /w/ was rare and probably secondary. Therefore, in the Third Millennium it was used to signify *wa*, *we*, *wi* and *wu*.¹⁵⁴ If this is the case, *-āwat and *-ūwat would seem sufficient not only to explain the Hittite collective -ā but also to provide a reason for its connection with the PIE feminine -ā.

There is no trace of a final *-t in PIH or PIE. The phonetic obstacle here to a borrowing from a Semitic suffix -at is not, however, so great as one might suppose. In both Semitic and Egyptian, the -t in the final position was clearly very unstable. When it was exposed, as when case or unstressed verbal endings were lost, the -t too was dropped, lengthening the previous vowel in compensation. This process took place for different forms in different languages at different times. In Egyptian -t was dropped during Late Egyptian 1600-1000 BCE.¹⁵⁵ In the Canaanite dialects the development -at>-āh was, if anything, rather later.¹⁵⁶ Such changes would, of course, have been too late to have affected PIE, let alone PIH.

This was not the case, however, with Eblaite, which is attested from the middle of the Third Millennium.¹⁵⁷ In this language, written in north Syria and, therefore, close to any *Urheimat* of Indo-Hittite or Indo-European, -t was frequently dropped, not only when exposed as a final, but also while case endings remained.¹⁵⁸ If this construction was expressed in writing, the process had probably been going on for a long time previously in speech. Then -at and -āt- were replaced by “-a” or “-a-” — the length of the vowel could not be expressed in Eblaite cuneiform. However, /ā/ is very likely the sound, not only through analogy with the normal compensation but also because in Amorite, spoken in north Syria around 2000 BCE, “-at in the absolute state was replaced by “-ā.”¹⁵⁹

Given the structural similarities of the gender system in Semitic and PIE, as well as those between the markers for the feminine and collective, the probability of a borrowing at some level is very high. Its time, place and nature, however, is much less certain. Before investigating these factors, we should consider the question of what kind of gender existed in the Anatolian languages. As mentioned above, the scholarly consensus is that there is no trace of gender in Hittite. Moreover, the active-

inactive gender system common in Euroasiatic was still strong in that language.

Some have argued that the existence of suppletive indicators of sex (using different stems for pairs of the type: ram-ewe, pig-sow or boy-girl) demonstrates that a sex-gender system did not exist. Fodor has denied this line of thinking, pointing out that such lexically distinct forms have existed throughout Indo-European with its strong gender system.¹⁶⁰

As mentioned above, most agree that the *-ā* for collectives did exist in Hittite.¹⁶¹ Furthermore, a minority of scholars insist that there was a three-way gender system in PIH before the separation of PIE from Anatolian, but as Szemerényi stated in 1985, “the question is still not settled.”¹⁶² Nevertheless, the probability is that a three-way system did not exist in the Anatolian languages.

The minimal hypothesis of borrowing from Semitic is the purely structural one that speakers of PIE were aware of a language organized by sex-gender and, therefore, they used their own collective *-ā* for the new gender. Not far removed from this reasoning, is holding that PIE speakers in the late Fourth Millennium were reinforced in their choice of a marker for the new gender by the knowledge that at least one of the closest Semitic languages indicated the feminine with an *-ā*.

The hypothesis that the PIH collective *-ā* itself derived from an Afroasiatic **-āwat*, although attractive, is obviously much more speculative.¹⁶³ In the first place, if one places the breakup of Indo-Hittite in the Fifth Millennium, the introduction of such a collective before that date would require a relatively nearby Afroasiatic language in which the final *-t* had been lost. One certainly could not project Eblaite that far into the past, although as shown above later evidence indicates the vulnerability of final *-t* throughout Afroasiatic. It is also strongly probable that at that time Semitic speakers were already ensconced in north Syria.¹⁶⁴

Another serious problem is the improbability that a collective would have been introduced into Anatolian before or without the feminine singular. There are in fact some slight indications that the Hittites were using *-a* as a female marker. If Szemerényi is right, the PIH root was **√gwen* (**k'wen*) and the final *-ā*, found in the Hittite *koinma*, was probably already a feminine suffix in Anatolian.¹⁶⁵ The use of this marker, however, does not mean that any of the Anatolian languages had set up a sex-gender system.

It is also possible that **k'wen* itself was borrowed from Semitic. Orel and Stolbova postulate an Afroasiatic root **kün* “woman, co-wife.” The

Akkadian *kinītu* and Arabic *kann-at* are found elsewhere, in Berber and West Chadic. Orel and Stolbova see the development in the Agaw *kwin- “woman” as irregular. Even so, it is possible that the Afroasiatic root, like the Indo-European one, was originally a labiovelar.¹⁶⁶

No doubt fewer traces of sex-gender can be found in the Anatolian languages than in other branches of Indo-Hittite. This may be because the Semitic influence developed further within Indo-European. Alternatively, gender in the Anatolian languages could have been limited or counteracted by the surrounding and underlying languages that lacked a sex-gender system: Hattic, Kartvelian, Hurrian, Sumerian, Elamite etc.

It is, in fact, easy to see how Semitic languages could have influenced the Anatolian in the Fourth Millennium. Urban life began at Ebla in the middle of the Fourth Millennium as part of the trading system made up of so-called Uruk, Sumero-Semitic speakers, and connecting Mesopotamia to Iran, Syria and central Anatolia. This is 1,500 years before Assyrian merchants were recorded in Hittite-speaking Karum Kanesh.¹⁶⁷ As far as I am aware, little archaeological evidence of contact between southwest Asia and the steppe has been found from before the disintegration of PIE in the Fourth Millennium. Nevertheless, using the grounds of vocabulary, some have argued that there was trading around the Black Sea at this time.¹⁶⁸

If the archaeological evidence is thinly stretched, the linguistic evidence of exchange between Semitic and PIE is strong. The lexical borrowings are supplemented by the grammatical borrowings mentioned above. In this context, there would seem no reason to deny that the concept of a feminine gender came to PIE from Semitic and little reason to deny that the gender’s marker -ā had the same origin. As stated above, the derivation of the Indo-Hittite collective plural -ā from an Afroasiatic *-ūwat or *-āwat is much less clear-cut.

That Indo-Hittite or Indo-European speakers borrowed the feminine gender does not mean the rigid Afroasiatic binary sex-gender system was reproduced. The earlier “active” gender of Indo-Hittite was split between masculine and feminine but the “inactive” one remained as neuter, with the original marker *-om preserved in the singular. The borrowed collective *-ā being used for the plural, but, as a collective, it took verbs in the singular. In this way Indo-European developed its unique three-way gender system.

CONCLUSION

The failure of Indo-Europeanists and other historical linguists even to consider the possibility of some relationship between the strikingly obvious similarities shared by the Indo-European and Afroasiatic gender systems is an example of the general academic tendency to avoid the obvious. In this particular case it is an indication that the men and women formed in the linguistic tradition of the Neo-Grammarians are still reluctant, or unable, to “think outside the box.” The limiting effects of this tradition must also be taken into account when considering Indo-Europeanists’ approaches to the possibilities of exchanges between individual languages belonging to the Afroasiatic and Indo-Hittite.

This chapter has been concerned the origins of Indo-Hittite and Indo-European and their contacts with Afroasiatic languages before the Third Millennium BCE. In the rest of the book I shall look at the linguistic relations between one Indo-European language, Greek, and two Afroasiatic, West Semitic and Ancient Egyptian, in the following three millennia.

CHAPTER 5

THE GREEK LANGUAGE IN THE MEDITERRANEAN CONTEXT

Part 1, Phonology

The next three chapters are concerned with supposed and actual influences of Egyptian and West Semitic on the development of Greek. As will be seen below, this inquiry gives very different results at the different levels of the Greek language. Greek phonology shows only a few signs of any Afroasiatic impact. Some morphological influences, treated in Chapter 6, can be seen and these explain a number of problems that have puzzled Indo-Europeanists. The introduction into Greek of certain Afroasiatic particles and conjunctions has significantly affected syntax. This aspect, considered in Chapter 7, is, however, linked to the great number of lexical borrowings from Egyptian and Semitic into Greek and these will be treated in the rest of the volume.

GREEK: RESULT OF A LINGUISTIC SHIFT OR OF LANGUAGE CONTACT?

A hierarchy of linguistic aspects like that described is to be expected in a “contact” language. Now I should like to consider the relationship of Egyptian and West Semitic to Greek in the context of modern theories of language contact. Historians of Greek have worked out the phonetic relationships among Greek dialects in exquisite detail. Apart from showing the descent from Proto-Indo-European (PIE), however, they are much more vague when they consider the origins of the Greek language as a

whole.¹ One reason for this vagueness is simply the lack of evidence. Nevertheless, the failure to apply modern approaches to the problem has a long tradition that I see as having an ideological basis. Wilhelm von Humboldt's conviction that Indo-European languages were qualitatively different from, and superior to, all others was mentioned in Chapter 1.² Furthermore, in his outline of the new discipline, later known as *Altertumswissenschaft* or "classics," he declared that the excellence of Greek lay in its being uncontaminated by foreign elements.³ Elsewhere, he maintained that Greek history and culture as a whole were categorically above that of all others and that "from the Greeks we take something more than earthly—almost godlike."⁴

Now, at the beginning of the twenty-first century, we can no longer set Greek apart as a special case. We should treat it like any other language and compare it with other mixed languages. A good way to do this is to examine Greek within the framework proposed in *Language Contact, Creolization, and Genetic Linguistics* by Sarah Grey Thomason and Terrence Kaufman. This work has been widely accepted as the best survey of the subject so far.⁵ Thomason wrote the first section of the book, which deals with language contact in general, and in this she found it useful to set up a scale of languages that appear to be mixed. It treats cases in which increasing degrees of contact have occurred. The culmination of this process is a linguistic shift in which a population gives up its language and takes on another.⁶ The distinction between contact and shift comes essentially from the perspective of the observer. What had been seen as the exotic language that influenced the native one, now itself becomes the focus of attention and is seen as having been influenced by the language it replaced. Typically, the context for such changes is the imposition of a colonizing language upon a politically or socially subordinate, but numerically larger, population. Let me illustrate this schematically:

Generation 1. Monolingual speakers of the native language X and Y-speaking newcomers interact. Each may possibly have a passive knowledge of the other language.

Generation 2. At least one group becomes bilingual. The X people speak their own language natively and Y with an X accent (and structure) and the Ys speak Y natively and possibly X with a Y accent (and structure).

Generation 3. Everyone speaks Y and X is dead. Two discernible accents, X and Y, still exist.

Generation 4. Y speakers with an X accent become dominant (possibly because of greater numbers), and this pronunciation becomes standard among the whole population.⁷

Thus, looked at retrospectively, language mixing from contact differs in the aspects of language affected from languages resulting from a shift. In most cases, the changes brought about through contact begin with vocabulary: First, nouns then verbs and modifiers alter and then the shift goes on to particles, prepositions and postpositions. After that, syntax and morphology and, finally, phonology are transformed. In languages where a shift has largely taken place, the old intonation, phonology and syntax tend to be retained long after the new vocabulary has been accepted. Examples of this can be seen in the Orkney and Shetland islands where, during the fifteenth, sixteenth and seventeenth centuries Aberdonian Scots replaced the old dialect, Norn. A few Norse words survive but the major difference between the dialects of the islands and those of the Scottish mainland is now in the former's strikingly Scandinavian intonation. By contrast, during the same period, while Sweden ruled Finland some Finnish speakers adopted every aspect of Swedish, except for the flat intonation of their original language. This flat pattern was adopted by the Swedish settlers themselves. Similarly, Irish English has absorbed remarkably few Irish words but still has a heavily Irish intonation and phonetic structure and some Irish syntax, as shown in the line from the song: "if its thinking in your inner heart."⁸

Language contact, in Thomason's sense that the native linguistic structures have been maintained while much or most of the vocabulary has been imported, is extremely common. It can be seen in many languages.⁹ Two particularly striking examples of this pattern are found in Old Javanese, or Kawi, and Coptic. Kawi was the language to which Humboldt devoted the last years of his life. It was, as he rightly perceived, a Malay language with a massive infusion of Sanskrit and Pali vocabulary.¹⁰ Similarly, Coptic phonology, morphology, syntax and basic vocabulary are fundamentally native Egyptian but a high proportion of the nouns and verbs, as well as many particles, come from Greek.¹¹ If we lacked a knowledge of Egyptian history of the relevant period, we could still infer that a minority of Greek speakers had dominated a larger Egyptian-speaking population for some centuries. It would be extremely implausible to use the linguistic evidence to propose that Egyptian speakers had dominated Greeks, but this kind of assertion is precisely what

supporters of the Aryan model ask us to do when looking at the very similar pattern of mixing found in Greek.

No one doubts that Greek contains linguistic mixture. The question is whether the mixture is the result of shift or contact. According to the Aryan Model, Greek is the result of a linguistic shift after Hellenes who spoke Indo-European conquered pre-Hellenes who did not speak Indo-European. The classicist J. Haley and archaeologist Carl Blegen argued in a well-known article published in 1927 that the distribution of place-names with the non-Indo-European elements *-nthos* and *-ssos/-ttos* corresponded with Early Bronze Age settlements (i.e. before the supposed conquest) and, hence, indicated pre-Hellenic settlements.¹² Archaeologically, the theory is very flimsy, as the correspondences would hold as well for Late Bronze Age as for Early Bronze Age sites. More importantly, the toponymic aspect is equally feeble as the hypothesis was abandoned by its creator Paul Kretschmer in 1924, when he pointed out that *-nthos* is found attached to Indo-European stems.¹³ Thus, while it is possible to hypothesize that these survived from earlier—pre-Hellenic—waves of Indo-European speakers, they cannot in themselves indicate a Pre-Indo-European language stratum.

In their 1927 article, Blegen and Haley also argued that the distribution of place names ending in *-issos* or *-nthos* corresponded with Early Bronze Age sites and thus the suffixes were indicators of a “pre-Hellenic” language.¹⁴ I attacked the Haley-Blegen hypothesis in Volume 1.¹⁵ Many of us make mistakes, and one, of which I am deeply ashamed, is my failure to recognize in *Black Athena Writes Back*, that Jasanoff and Nussbaum had stated plainly that their belief in a pre-Hellenic language or languages was “utterly independent of the Haley-Blegen theory or any other particular reconstruction of Aegean Prehistory.”¹⁶ Such opting out provides a convenient if not unassailable position. Jasanoff and Nussbaum fail to give any evidence for these languages, apart from the Greek vocabulary that cannot be explained in terms of Indo-European. While I disagree with them that this “unknown” vocabulary offers evidence of a substrate of non-Indo-Hittite words, I happily concede that there may be traces of an Indo-Hittite influence on the Indo-European basis of Greek, including the toponymic suffix *-ssos*, (although not *-nthos*).¹⁷ Nevertheless, such influences are trivial compared to the massive impact upon Greek of the Afroasiatic languages through contact.

For an analogy, let us look at the situation in northern India, where

Indo-European speakers appear to have overwhelmed an indigenous population that did not speak an Indo-European language. Sanskrit and the other ancient Indic languages indicate that in a shift the native speakers accepted most of the Indo-European morphology and nearly all of its vocabulary. The original people, however, retained their phonology to such an extent, that the invaders themselves adopted it. By contrast, the Dravidian languages, surviving in southern India, indicate contact but no shift. These languages accepted large numbers of Indic words and some morpho-syntactical patterns but retained their basic grammatical structure and pronunciation.¹⁸ The Indo-European aspects of Greek are the opposite of those found in Sanskrit: Greek has an Indo-European phonology and a large non-Indo-European vocabulary, while Sanskrit has a non-Indo-European phonology and an overwhelmingly Indo-European vocabulary. In fact, taking Indo-European as the base, the pattern found in Greek shows a striking resemblance to that of the Dravidian languages. Thus, by analogy the Greek mixture should probably be seen as the result of contact not of a shift.

In a few situations a bilingual minority has retained its basic vocabulary in order to maintain its identity, while giving up most of its phonology and syntax. Teleologically, such a language can be described as “dying,” but the process can last many centuries.¹⁹ Examples can be found in English Romany, and the Modern Greek spoken in Turkey, before the expulsions from Asia Minor of 1921-2, where, as an author put it in 1916, “the body has remained Greek, but the soul has become Turkish.”²⁰ Could this have been the case in Ancient Greece with the pre-Hellenes as equivalents of the English Rom [Gypsies], abandoning nearly all aspects of their language except for their vocabulary?

I argue that the answer is no. In such situations, the minority or socially subordinate population retains the words of everyday life, which is not the case for the hypothetical speakers of pre-Hellenic. The etymological lexicographer of Greek, Pierre Chantraine, pointed out that the fundamental elements of the Greek vocabulary: those forms concerned with family and domestic animals, simple adjectives and basic verbs largely derived from Indo-European.²¹ Greek shows a stark contrast between the less than 40 percent of the total vocabulary as Indo-European, described by the Indo-Europeanist Anna Morpurgo-Davies, and the 79 percent of Indo-European words found in the Swadesh 100-word list.²² In the three cases on the Swadesh list where there are Indo-European

and apparently non-Indo-European synonyms, the Indo-European word is thought to be older.²³

All in all, the linguistic shift suggested by the Aryan Model is extremely unlikely because it would require the pre-Hellenic population to have given up its phonology, morphology and everyday vocabulary for those of its Indo-European-speaking conquerors, while retaining much of its sophisticated lexicon. On the other hand, the pattern found in Ancient Greek is exactly what one would expect to emerge from linguistic contact. Even the discrepancy between the vocabulary as a whole and that of the basic 100-word list is the same as that found in England after the Norman Conquest. Estimates vary, but it seems clear that while more than three-quarters of the Middle English vocabulary derived from French, less than 10 percent of the Swadesh list came from the language of the conquerors.²⁴

THE ELEMENTS OF THE GREEK LINGUISTIC AMALGAM

If the mixed origin of Greek is to be seen as the result of *contact* not *shift*, with which languages could it have been in contact? Here I shall make a digression. In the summer of 1997, Colin Renfrew invited me to lunch at Jesus College, Cambridge, where he was then master. At the lunch I made the case that Greek was not a “shift” but a “contact” language. Though unorthodox for conventional scholars, the idea fit well with Renfrew’s “model of autochthonous origin” for Greece that he had promoted for years. With typical and refreshing hubris he plunged into the field and, the following November, he presented a paper arguing that the bulk of the non-Indo-European vocabulary in Greek derived from an adstrate “or even a superstrate” rather than from a substrate. He published the paper the following year.²⁵ In this he insisted that the adstrate was Minoan.

Renfrew’s archaeological justification for this is clear. Abundant evidence exists of Minoan material culture and its influence in Mycenaean Greece 1600–1200 BCE, which was clearly an important period in the formation of the Greek language. Furthermore, the Mycenaean script Linear B was adapted from Minoan Linear A. It is also likely that a considerable portion of the language of Linear A was West Anatolian and, therefore, Indo-Hittite.²⁶ Unfortunately, Renfrew does not appear

to have consulted anyone who knew West Semitic or Ancient Egyptian and he failed to note the substantial work carried out on Semitic loans into Greek. Had he done so he would have discovered that most of the words on which he based his case had well established Semitic or Semito-Egyptian etymologies.²⁷ The best way to explain this apparent discrepancy is to assume that the Minoan language itself received many loans from Semitic and Egyptian.

The archaeological evidence of substantial contacts and exchanges between Egypt, the Levant and Crete during the Third and early Second Millennia BCE is outlined in Volume 2.²⁸ Cyrus Gordon may not have shown that the language of Linear A was Semitic but he did demonstrate some significant Semitic loans in it.²⁹ It is also likely that these Semitic and Egyptian loans were precisely in the areas of luxury and sophistication, which were later passed on to Greek. Some of the Egyptian loans into Greek indicate such an early date that they can only have been introduced to the mainland before the arrival of the Proto-Greeks or, more likely, the loans were introduced to Crete during the Third Millennium and later passed on into Greek.³⁰ In the future, scholars may be able to distinguish specific words as either indirect or direct loans from Egyptian and West Semitic but at present it is impossible to know what phonetic changes passage through Minoan would have involved.

Therefore, one should merely go to the sources, the two most widespread and culturally significant languages of the east Mediterranean in the Second Millennium BCE, West Semitic and Ancient Egyptian. Not only are these languages understood (unlike Minoan), but they were spoken by peoples about whom we have a considerable amount of evidence from documents and archaeology.

The rest of this chapter is concerned with the level least affected by extra-Indo-European influence—phonology.

THE PHONOLOGIES OF INDO-HITTITE AND INDO-EUROPEAN

It must be emphasized here again, that I do not claim that Greek is anything but an Indo-European language. Its morphology fits into the family as well as does any other member and better than most. Its verbal system appears to be closer to that of PIE than any other language except Sanskrit. This is not surprising as Greek is, apart from Hittite, by far the oldest attested Indo-European language. It is not the archaism but

the degree of modification that is remarkable. Mycenaean Greek is recorded from the Fifteenth to the Thirteenth centuries BCE and the Homeric language would seem to be equally if not more archaic. Nevertheless, there appears to have been considerable change in both the morphology and the phonology between the disintegration of PIE and the earliest attestation of Greek. While the morphology of the Greek verbal system appears to have been remarkably close to that of PIE, the opposite is true of nouns. The Greek nominal declension lost three Indo-European cases: the ablative, locative and instrumental in the singular and the first two in the plural. This is in contrast to Latin, first recorded a thousand years later, which retained the ablative and Lithuanian which today still has the original eight cases.

The degree of phonological change is difficult to assess as there is much disagreement over the reconstruction of this aspect of PIE. I shall leave aside, for the moment, the vowels and focus on the consonants and, in particular, on the stops. The conventional view of these today modifies a four-series system established in the 1870s by the Neo-Grammarians, who drew upon a comparison of the Sanskrit, Greek and Latin systems to produce the following:

(b)	bh	p
d	dh	t
g	gh	k
g ^w	gh ^w	k ^{w31}

Such a system is unparalleled in any living language in none of which was there a series of voiced aspirates without another of the unvoiced set, ph, th, kh and kh^w. For this reason, the linguist Oswald Szemerényi proposed reinserting the unvoiced aspirates p^h etc. into the matrix and deriving the voiced ones from stop +h.³² Four-way systems have not been found elsewhere. Nevertheless, by making the voiced aspirates secondary Szemerényi believed that he had solved the typological problem, as the three-way structure he proposed occurs frequently elsewhere. Szemerényi's new scheme, however, still encountered the previous difficulties that had made linguists abandon the unvoiced aspirates because evidence from daughter languages pointed to voicing.³³

These continuing problems forced a major revision that took place almost simultaneously in the United States and the Soviet Union. Paul Hopper, Thomas Gamkrelidze and Vjačeslav Ivanov all agreed that what

had previously been seen as plain voiced stops should be interpreted as glottalics or ejectives. They proposed two other series: one voiced and the other unvoiced with phonetic but not phonemic alternations between plain and aspirated stops. This proposal produced the following scheme:

I	II	III
(p')	b ^h /b	p ^h /p
t'	d ^h /d	t ^h /t
k'	g ^h /g	k ^h /k
k ^w	g ^{wh} /g ^w	k ^{wh} /k ^w

Such a system appears frequently in other languages. It also provides a number of other advantages over the traditional schemes. First, the absence or extreme rarity of the sound reconstructed as /b/ in the traditional schemes is unique among languages that have labial series. The absence of an emphatic p', however, is quite normal. Second, while voiced stops are frequently used as inflexional affixes and pronouns, glottalized stops are not and this series does not appear in these functions in Indo-European. Third, root structure restraint laws in Indo-European appear arbitrary if one follows the traditional system. Under the new one, they are simple voicing agreements and a prohibition of two glottalics in a single root.³⁴ Fifth, the fact that Armenian and Germanic have similar stop systems, which are unlike all the other Indo-European languages, is less easily explained as two independent developments among language speakers who had no contact with each other than as the two surviving archaic forms (the emphatics simply became unvoiced stops). A further advantage is that the emphatic scheme makes it easier to fit Indo-European into the larger language super-families, Euroasiatic and Nostratic.

A large number of Indo-Europeanists have accepted much or all of the new scheme, though others have not.³⁵ Most in the latter group simply assert that reconstruction from within Indo-European is the only acceptable method and that the typological arguments should be subordinated to these. Others continue to work within the traditional framework oblivious to the new challenges.³⁶ To my knowledge, the best scholarly argument against the new system from the traditional point of view is that made by Oswald Szemernényi. Szemernényi warns against accepting typological arguments on the ground that oddities or even *hapakes* (single exceptions) occur in all languages. He has, furthermore,

found a language, Kelabit in Sarawak, which has the same set he reconstructed for PIE, $d-d^h-t-t^h$. He also argues that the b/p' is not absent from PIE, although he admits its rarity. He points out that previous scholars have shown that the so-called restraints are simply assimilations of irregularities. He further claims that Hopper, Gamkrelidze and Ivanov have not shown the stages through which the glottalics could have become plain voiced stops when it is known that “unaspirated stops are among the most stable known.”³⁷

These are powerful arguments but I believe that they fail to refute the new scheme. Clearly oddities do occur in all languages, but the extreme rarity of the traditional PIE phonological system does not render the scheme impossible, although it does make it unlikely. Szemerényi's case that b/p' occurs occasionally, which Hopper, Gamkrelidze and Ivanov all admit, does not overthrow this part of the argument. Even rarity would be puzzling if the original stop really had been a $/b/$. Hence, the restraints remain significant, even if a few exceptions occur.

One of the attractions of the new scheme is that glottalics and most other emphatics are neither voiced nor unvoiced; therefore, “they can fall either way.” Gamkrelidze takes an example from the northeastern Caucasian languages Batsbi, Chechen and Inguish. He shows that in medial and final positions Batsbi glottalics develop into voiced stops in the other two languages.³⁸ Finally, Szemerényi does not deal with the advantages of the glottalic theory in helping situate Indo-European within the larger linguistic macrofamilies.

The Russian linguist Sergej Starostin, however, has raised another objection to the glottalic theory. Starostin believes in a restricted Euroasiatic language family consisting merely of Indo-European, Uralic and Altaic. He does not accept close relations with Kartvelian or North Caucasian, let alone with Dravidian or Afroasiatic.³⁹ He argues that glottalics do not occur within his narrow Euroasiatic family and therefore are unlikely to have occurred in PIE. He maintains that this stop series must have been marked in a different way, possibly “tense” as opposed to “lax.” He backs this hypothesis by citing the so-called “Winter's Law,” which is applicable to Balto-Slavic languages. According to this construction, vowels preceding stops of series I are lengthened. Gamkrelidze sees no difficulty with this idea, although his “lengthening” glottalics would require an additional laryngeal.⁴⁰ Starostin and the Indo-Europeanist N. E. Collinge argue that, if anything, glottalics shorten preceding consonants.⁴¹ I find this second argument plausible, although

not Starostin's. As can be seen from earlier chapters, I side with those who take a larger view of Nostratic, one that includes Kartvelian, North Caucasian and Afroasiatic. In all of these glottalics are or have been abundant. Thus, there is no inherent reason why PIE should not have preserved this archaic feature after Uralic and Altaic had lost it.

PHONOLOGICAL DEVELOPMENTS FROM PIE TO GREEK

It would seem prudent to accept the new system, while remaining agnostic as to the exact articulation of the emphatic series. In either case, Greek would seem to have modified its consonants more than many Indo-European languages.⁴² Even under the phonological system of the Neo-Grammarians, Greek would appear to have been very innovative. Thus combining the phonetic, the morphological and the lexical (see Chapters 7 and 8) evidence provides a picture of extraordinary transformation between the break-up of PIE which is conventionally dated to the last half of the Fourth Millennium, and the earliest known Greek. These changes, which took place in less than 1,500 years, were far greater by every measure than those over the succeeding 33 centuries during which the Greek language, although helped by a strong literary tradition, has survived many major invasions and social upheavals with remarkable tenacity.

Both the Revised Ancient Model and the Aryan Model offer explanations for this early transformation. The former model offers direct and indirect (through Crete) influences on Greek from the Afroasiatic in the Third and early Second Millennium. The Egyptian and Semitic spoken by the settlers of the early Mycenaean period and intensive later contacts would have substantially modified the local Indo-European dialect. The Revised Ancient Model, however, also accepts that later Greek could have been affected by internal developments within Indo-European and by a possible Indo-Hittite substratum.

Proponents of the Aryan Model rely solely on internal developments and an undetermined pre-Hellenic substratum. Indo-Europeanists have long recognized that "substrates" can significantly affect the language of the conquerors. Antoine Meillet, for instance, pointed out that the contrast between Armenian, which retained its declension but lost all markers of gender, and the Iranian of "Persian," which lost both, can be explained by the characteristics of the non-Indo-European languages

of the regions. South Caucasian and Uartian in the first case and Elamite in the second already possessed these traits.⁴³

In Chapter 4, I mentioned that Szemerényi had proposed substantial contact and linguistic flow between Indo-European and Semitic. Observing the transformation of the PIE five-vowel system (a, e, i, o, u or $\bar{a}, \bar{e}, \bar{i}, \bar{o}, \bar{u}$) to the three vowels of Indo-Iranian (a, i, u or $\bar{a}, \bar{i}, \bar{u}$) he linked the reduction to what he saw as the vowel system of Proto-Semitic. Saul Levin has argued that the latter had a more complex system.⁴⁴ This issue, however, is unimportant, because Akkadian, the language with which Indo-Iranian speakers would have been in contact, did have that three-vowel system with the exception of an /e/ whose presence Szemerényi somewhat glosses over. Szemerényi maintains that speakers of Proto-Semitic had been ruled by Indo-Iranians during long periods of the Second Millennium BCE.⁴⁵ The significance of Szemerényi's considerable work in this area is that he has pioneered a new comparison of Indo-European and Semitic. Given their historical and geographical proximity and the fact that these two language families have been superbly studied in great detail, such a comparison might seem obvious. But, as I argued in Chapter 4, Indo-Europeanists' failure to investigate the striking parallels between the gender systems of PIE and Semitic demonstrates that Szemerényi's work required originality if not real courage.⁴⁶

While accepting the possible importance of substrates, we can add another principle to the study of the languages of the ancient East Mediterranean: linguistic "convergence." In general, convergence has been investigated far less than "divergence," which has been the basis of historical linguistics, devoted to the ramifications of language families. Recent scholars have pointed out that not only can languages be influenced by substrates but also that contiguous languages can have phonetic, phonemic and morphological resemblance's brought about by new changes cutting across "genetic" language boundaries.⁴⁷ Today, the French Academy and German linguistic purists worry about English vocabulary entering everyday speech and colloquial writing but they are also concerned about English influence on syntax and grammar. In the eighteenth and nineteenth centuries the boot was on the other foot; the Dickensian /w/ for /v/ in "wery" seems to have been a Cockney imitation of an affected French accent. Similarly, the Parisian uvular /r/ spread among fashionable people outwards from the cities of western Europe.⁴⁸ On the grammatical plane, the pretorite simple past "made" has given ground to the compound perfect with the auxiliary "have" "have made" in languages

influenced by seventeenth-century France during the reign of Louis XIV. Usually, as in the instances given here, speakers of the modifying language have higher political and cultural status than those of the language affected. Enough examples of substrate influence exist to indicate, however, that this is not always the case. Even contemporary innovations can come from people of lower status. It has been plausibly argued, for instance, that many of the innovations of American English came from the Creoles spoken by African slaves.⁴⁹

Did any of these processes occur in Greek in its formative period? It would seem worthwhile to look at Greek divergences from PIE to see if they can best be explained by impulses already in the original language, from a substrate or from convergence. No doubt that convergence was at work round the eastern Mediterranean during the Third and Second Millennia BCE. Cyrus Gordon and Gary Rendsburg have shown that Egyptian had a profound lexical morphological and syntactic influence on Canaanite during this period.⁵⁰

In all cases it would seem useful to consider Greek with other languages with the same or similar features or innovations and—if possible—to establish directional flow. To do this, I have chosen fifteen phonological changes that appear to have taken place in Greek after the separation from PIE.⁵¹ Eleven of these changes had occurred before the standardization of Linear B orthography, which probably took place considerably earlier than its first attestation at the end of the seventeenth century BCE.⁵² Four others shifted after this but before the creation of the epic style contained in Homer. They follow in approximate chronological order.

Fifteen phonological changes

1. LOSS OF LARYNGEALS. By the time of the break-up of Indo-European in the narrow sense, the earlier laryngeal system had been reduced to a single /h/; even this disappeared except in Armenian where it seems to have survived for some time as a result of local Anatolian influences. Laryngeals appear to have been absent from Germanic before its voiceless stops became fricatives.⁵³ In Greek, the laryngeals may have influenced the aspiration of stops and their phonemicization. The loss is obviously extremely early.

Unless the pre-Hellenic differed greatly from the Anatolian languages,

in which laryngeals still clearly flourished in the Second Millennium, there can be no question of substrate influence in this change. Similarly, because laryngeals continued to be strong in Caucasian, West Semitic and Egyptian, the innovation could not have come from any of these. Given the earlier weakening of the system and the fact that the disappearance of the laryngeal /H/ was widespread among Indo-European languages, it would seem almost certain that the innovation was the result of tendencies already present in the proto-language.⁵⁴

2. THE MERGER OF STOPS AND ASPIRATES. It seems likely that a phonemic distinction developed between voiced and unvoiced stops and their previously allophonic aspirates in the ancestors of Indo-Iranian Greek and Italic. In Indo-Iranian, all four series maintained their independence.⁵⁵ In Greek they appear to have merged in the following way:

$$\begin{array}{l} p^h \ t^h \ k^h \ k^{wh} \\ b \ d \ g \ g^w \end{array} > p \ t \ k \ k^w$$

$$\begin{array}{l} b^h \ d^h \ g^h \ g^{wh} \\ (p') \ t' \ k' \ k^{w'} \end{array} > p^h \ t^h \ k^h \ k^{wh}$$

$$(p') \ t' \ k' \ k^{w'} > (b) \ d \ g \ g^w \text{ } ^{56}$$

The situation is further complicated by the likelihood that Macedonian and Phrygian, which in many other respects are close to Greek, apparently did not go through these changes.⁵⁷ This complication (and the fact that the mergers are unlike anything known of Anatolian, Semitic and Egyptian) make it impossible for the merger to have been a real feature of the East Mediterranean. Unless the pre-Hellenic language was completely different from any of these, the change is unlikely to come from substrate influence. We know that widely in Indo-European aspirated and non-aspirated allophones of the voiced series split, but no explanation can be given for their distinctive rearrangements in Greek.⁵⁸

3. THE SHIFT FROM EMPHATIC TO VOICED STOPS. Emphatic (sometimes glottalic) stops appear to have existed throughout Indo-Hittite, Afroasiatic and the Caucasian languages. They or creaky voiced or implosive developments seem to have persisted long enough after the disintegration of Indo-European for some other consonantal shifts to have taken place. Thus, in Germanic and Armenian, where the voiceless stops become

voiceless fricatives or aspirates, the spaces or *cas vides* were filled by the previously emphatic stops. Thus $p' > p$, $t' > t$, $k' > k$ and $k^{w'} > k^w$. In Greek and Italic the unvoiced series was already filled (see above) and the empty slot was the voiced series. In Anatolian stops fell together, each set—dentals, labials, etc.—merged.

The situation is equally confusing in Semitic. Glottalic stops survived in Ge'ez and the northern Ethiopic language Tigrinya and in some south Arabian languages.⁵⁹ In Arabic, however, while the emphatic series maintains its independence it has become pharyngealized. The Ashkenazi pronunciation of the Hebrew *tsade* as *ts* and its transcription in Greek as /ss/ as in βύσσοϛ(5) from the West Semitic *buṣ* make it probable that the emphatics were still glottalized in Canaanite in the Second Millennium.⁶⁰ In Egyptian it is likely that /q/, the only surviving emphatic, was deglottalized very early and that by the beginning of the Second Millennium it was merging with the neutralizing g/k.⁶¹

The absence of emphatics in Egyptian and Anatolian may have hastened their disappearance in Greek. On the other hand, as the process was almost universal among Indo-European languages, it is likely that the series was already unstable to the point of disintegration and that Greek merely shared in this general trend.

4. THE WEAKENING OF INTERVOCALIC -S- AND THE REPLACEMENT OF INITIAL S- BY H-. Unlike the innovations mentioned above these shifts have a fairly coherent temporal and geographical distribution.

Germanic, Hittite, Hurrian, Kartvelian, Urartian?
 Albanian, *Phrygian*, *Armenian Italic*, *Greek*, *Lydian*, *Lycian*,
Avestan, Sanskrit,
Ugaritic *Aramaic* *Canaanite* *Arabic* *Sabean*
 Eblaite Akkadian, Amorite? Egyptian, Minean, Qatabanian
 Hadramitic
Ge'ez

The shift occurred only in the italicized languages. Those languages unaffected by the shift tend to have been either ancient or geographically peripheral. This distribution indicates that the innovation was centered in the East Mediterranean in the Second Millennium BCE. Such shifts are acknowledged but unexplained in Indo-European. While Semitists do not generally acknowledge these shifts, they can be seen in three fundamental areas: pronouns, conjunctions and verbal prefixes.

These are shown below:⁶²

	Ebla.	Akk.	Qatab.	Amor.	Ugar.	Canaan.	Aram.	Arab.	Sabean.	Ge'ez
He	suwat	suwa	s ¹ u	su	hw	hu	hw	huwa	hw	wə ^{>} ətu
She	siya	si	s ¹ yt	?	hy	hi	hī	hiya	hy	yə ^{>} Eti
Suff.3m	-su	-su	-s ¹ ww		-h	-hu	-h	-hu	-hw	-hu
Suff.3f	??	-sa	-s ¹ yw		-h	-ah	-h	-ha	-hw	-ha
If	?	summa	?		hm	^{>} im	^{>} en	^{>} in	hn	^{>} emma
Causat.	(s)-?	s-	s ¹ -	h-	s-	hi-	^{>} a	^{>} a	h-	^{>} a

In Canaanite initial *h-* was largely restricted to pronouns and other basic words. In other vocabulary items the shift was often from *s>h*, as in such Hebrew doublets as *šlm/hlm* “healthy” and *šrb/hrb* “parched.”⁶³

Despite the fact that Ge'ez, which is otherwise archaic, has forms with /*h*/ or /*ḥ*/, /*s*/ is primary in Semitic. Not only is it attested in the oldest languages, Eblaite and Akkadian, but it has cognates in other Afroasiatic languages. In Egyptian the third-person dependent pronouns are *swt sy* or *st*, the causative prefix is *s-* and the word for “healthy” *snb* cognate with *šlm/hlm*.⁶⁴ There are also relics in later languages of *s-* in situations usually occupied by *h-*. Thus, the shift *s>h* is sporadic in Semitic while, except before stops, *s>h* is universal in Armenian, Greek and Avestan. Nevertheless, the examples given above show that the shift's occurrence in Semitic was sufficiently systematic for it to be considered alongside that in the Indo-European languages given their geographical contiguity.

Yet another example of the shift comes from the Anatolian language of Lycian. It is now agreed that Luvian written in cuneiform, “hieroglyphic Hittite,” and Lycian written alphabetically should both be seen as different stages of the same language or close linguistic family.⁶⁵ The orthographies of the first two were probably established in the Third Millennium. I have argued elsewhere that Lycian spelling was conventionalized in the Second.⁶⁶ From Greek transcriptions we have information about its pronunciation in the fifth and fourth centuries BCE. The shift *s>h* took place between the establishment of the first Hittite and Luvian, on the one hand, and Lycian, on the other. For instance, the Luvian possessive suffix was *-assi*, while in Lycian it was *-ahi* or *-chi* though in one dialect it was still *-esi*. The Luvian for “god” was *masana*; in Lycian it became *mahana*, which in the First Millennium was reduced still further to *man*.⁶⁷

It is interesting to note that not only did these shifts occur in the same

general region but also they all appear to have taken place in the Second Millennium. Since it is attested in Linear B, the shift must have occurred in Greek before that orthography was established around or earlier than 1600 BCE. Szemerényi gives a *terminus post quem* for the Lycian shift of 1200 BCE, when the Hittite New Kingdom broke up.⁶⁸ I see no reason why, on the grounds given above, it should not have been earlier. Nevertheless, the social and political upheavals at that time would seem a plausible context for the change.

The establishment of the conventions of Eblaite and Akkadian orthography around the middle of the Third Millennium provides a *terminus post quem* for the shift in Asiatic Semitic. Another important temporal indication comes from Ugaritic where the causative remained s-, while the pronouns, and the conjunction had already changed to h- before the spelling was fixed. Thus, here the indications are that the shift was taking place in the first half of the Second Millennium BCE.

It is impossible to date the shift in Armenian though it may have come as a result of the change in Iranian, which in itself is very hard to periodize. Szemerényi argues that the Armenian shift must date from the tenth century BCE because the Old Persian-Hindu (Indus) for the Indo-Aryan Sindhu and the Old Persian Huza for the Elamite Susa are supposed to indicate that the shift can only have been taking place when Iranians occupied or were close to the regions concerned. If I understand this argument correctly, it is absurd. Peoples' names for distant places, especially capitals—Susa was the capital of Elam—and major rivers, are susceptible to influence from the native pronunciation. However, they usually undergo the normal sound shifts. For instance, one cannot draw any conclusions on the whereabouts of the Dutch from the fact that they call Berlin, Paris and Turin Berlijn, Parijs and Turijn. Simply, the language went through a shift i(ĭ)>ij(ēi).

In any event, this low dating is clearly wrong because it is now generally agreed that Zoroaster and the Gatha poems attributed to him—in which the s>h shift had already taken place—should be put in the twelfth or thirteenth centuries BCE. Even if the shift can be shown to have taken place before then, some serious difficulties remain in linking it to that in the other languages. The major objection is the presence of “s-speaking” Indo-Aryans in the Mittanni Kingdom in northern Mesopotamia in the fourteenth century BCE. Thus, either the shift took place after this or it happened earlier but farther to the north and east. In either case, there is a disjunction of either time or space with the other similar shifts.⁶⁹

The only possibility would be to link it to the spread of Old Aramaic into Assyria, which could have taken place in the thirteenth century even, although it is only attested three hundred years later. This, however, is far too flimsy evidence on which to build a case. In any event, even without knowledge of the changes, if any, in the intervening languages (Hurrian, Urartian and Elamite) it is impossible to say anything of significance about the relation of the Avestan shift to those elsewhere. The relative coincidences of time and place remain suggestive. It should be remembered, however, how easily this particular shift $s > h$ (which is merely one form of a weakening of a consonant) can occur without any obvious outside stimulus; for instance the shift of this type appeared in Welsh, but no other Celtic language.⁷⁰

In short, Greek development did occur at approximately the same time in several nearby languages to the east. With the possible exception of West Semitic, where the shift was incomplete, the Greek change appears to have taken place earlier than the others.

5. THE SHIFT FROM INITIAL y - TO h - OR ZERO AND ITS WEAKENING OR DISAPPEARANCE IN OTHER POSITIONS. These changes occurred in Greek about the time of the establishment of Linear B.⁷¹ Armenian too has some modification of y - but no clear-cut shift can be discerned.⁷² During the Third Millennium, presumably under the pressure from Sumerian, the Akkadian initial y - disappeared or was reduced to [>]*aleph*.⁷³ Canaanite has remarkably few words with initial y - that are not etymologically derived from w - (see below).⁷⁴ In both Canaanite and Aramaic intervocalic $-y$ - underwent syncope.⁷⁵ There is also the apparent change in the vocalizing of the Egyptian sign of a reed, transcribed i , from y to [>] a and the later shift from $/i/$ to $/a/$ in closed accented syllables.⁷⁶

It is interesting to note that, while languages like Italic and Avestan retained at least initial y -, Greek and Armenian, the two Indo-European languages closest to Semitic-speaking areas and with most Semitic loan words, should have shared the latter's weakening of the semivowel.

6. THE PALATALIZATION OF $/tʲ/$ AND $/ti/$ TO $/s/$ AND $/dʲ/$ TO $/z/$. These innovations were probably related to the weakening of y . They occurred in Greece before the standardization of Linear B, but after the shift $s > h$ and were possibly encouraged by the *cas vide* the latter provided. Although $/tt/$ is rendered as $/s/$ in Albanian and $/tʲ/$ becomes $/ts/$ in Canadian French, this change did not appear in other ancient Indo-European

languages.⁷⁷ Allen Bomhard has argued plausibly that Proto-Semitic contained a series of palatalized dentals /tʲ/, /tʲʷ/ and /dʲ/.⁷⁸ Since they survive as interdental, however, they are usually represented as such in reconstructions. The series merged with /š/ /s/ and /z/ in Akkadian at the very beginning of the Second Millennium.⁷⁹ They survived independently in Ugaritic. Nevertheless, the shift tʲ > s etc. may have begun in Phoenician well before 1500 BCE.⁸⁰ This possibility could link the Phoenician shift with Greece and especially with Mycenae. While the shift tʲ > s was pan-Hellenic, its extension ti > si, occurred in Ionic and Arkado-Cypriot and, possibly in Mycenaean but not in Doric. At that time Doric was the language of northwest Greece and was therefore least affected by palatal culture with its Levantine connections.⁸¹

The system of palatalized dentals collapsed throughout Asiatic Semitic. In Arabic they kept their independence but became interdental. In Ge'ez, however, they turned into sibilants, an indication of how easy this outcome can be. Given their geographical proximity and their intense cultural contacts, the Canaanite shift can plausibly be derived from the Akkadian one, despite the possible Arabic solution and the Aramaic change tʲ > t. Whether the Greek shift can be linked to the Canaanite is more debatable. The main problem is that posed by the place-name Tyre. If the name had been pronounced ṭʲ(y)or in the first half of the Second Millennium, its appearance in Greek as Tyros would require its borrowing before the Canaanite shift tʲ > š but after the Greek shift. In any other case, it would have emerged as *Sur [Sor is, in fact, the old Latin form borrowed from the Canaanite Šor].⁸² Thus, there must have been a period after the Greek change but before the Canaanite. The only other possibilities would be that the Semitic series were interdental, as they are conventionally rendered, or they were palato-alveolar affricates not recognized by Greek speakers as their own /tʲ/. The latter possibility would indicate either that the changes were unrelated or that they took place in the Aegean before they occurred in the Levant. Nevertheless, the coincidence, coupled with the uniqueness of the Greek shift within Indo-European, would lead one to believe that areal factors were in some way involved.

7. THE PALATALIZATION OF kʲ > ss. This change does not appear to have been part of the general phonemesization of palatalized velars, before front vowels, associated with the breakdown of labiovelars that seems to have spread from the ancestor of Indo-Iranian to those of Balto-Slavic,

Armenian and Albanian: the so-called “satem languages.”⁸³ The Greek shift seems to have paralleled the one from $t^y > s$ and, like the latter, it occurred between the shift $s > h$ and the orthographic formation of Linear B. No independent series of palatalized velars exists in Asiatic Semitic. Nevertheless, there are indications from the Gunnan-Gurage languages of Ethiopia and correspondences between /k/ and /s/ in other languages that such a series may have existed in Proto-Semitic.⁸⁴ It is impossible to say for certain if it existed in Asiatic Semitic, let alone for how long. Thus, for the present at least, one cannot link this Greek innovation to any Semitic or other areal tendency.

8. THE DEVELOPMENT OF -ss-/-tt-. Apart from the shifts $k^y s > ss$ and $t^y s > ss$, many Greek words with the alternations -ss-/-tt- appear to have been loans.⁸⁵ The simplest explanation is that these forms were borrowed from Semitic sibilants that did not exist in Greek or any other Indo-European language. The most obvious candidate is the Semitic emphatic dental affricate /ʃ/. Its early phonetic value has been debated, but the argument that the present Ashkenazic pronunciation of *šade* as an emphatic t^s is the original seems to have prevailed.⁸⁶ This pronunciation and the rarity of these geminated consonants would explain the alternations.⁸⁷ Other Afroasiatic sibilants, however, also appear to have sounded uncertain to Greek speakers and to have appeared in many different forms including -ss-/-tt-. Probably the best-known example of the alternation is *θάλασσα*/*θάλαττα* “sea,” the most plausible etymology for which is the Egyptian *tš* (discussed in Chapter 8).⁸⁸

9. FINAL -m TO FINAL -n. It is conceivable that Linear B lacked final consonants because Mycenaean Greek did not possess them.⁸⁹ In any event, it is impossible to date the shift $-m > -n$ beyond saying that it was pre-Homeric. The same change occurred in many other Indo-Hittite languages, notably Venetic, Germanic and Hittite. That some Venetic dialects did not appear to have experienced the change has led to the plausible suggestion it was late in that language.⁹⁰ This change came much later still to Germanic and is also incomplete. The early occurrence in Anatolia, however, makes it possible that the Greek innovation could have resulted from an Indo-Hittite substratum. On the other hand, it could equally well have come from Akhaian (Anatolian) influence in the fourteenth century BCE or simply from an independent development. The occurrence of the same shift in Aramaic and Arabic may also have been the result of Anatolian influence.

10. LOSS OF FINAL DENTALS. Finals -t and -d appear to have been common in PIE. They do not occur in the Greek of Linear B or Homer. The only other Indo-Hittite language that appears to have dropped them is Lycian.⁹¹ The Greek loss, however, is unlikely to be the result of any Indo-Hittite substrate influence because these dentals are frequent in Lydian.⁹² Even more strikingly, they seem to occur in Phrygian, which was in most respects Greek's closest linguistic relative.⁹³ This makes it almost certainly a Late Bronze Age innovation.

As discussed in Chapter 4, final -t is extremely common in Afroasiatic especially as a feminine marker of nouns and verbs. This dental was disappearing from Eblaite in the middle of the Third Millennium and dropped from Egyptian at the end of the Middle Kingdom. The process, however, probably started much earlier.⁹⁴ The disappearance from Canaanite was later and less complete. In Canaanite the disappearance of final -t from feminine suffixes occurred rather later. Zellig Harris put various shifts in or around the fifteenth century.⁹⁵

Although, as I have argued above, the Eblaite final -a in the feminine may have influenced that in PIE, it does not appear to have been part of a trend in Akkadian. In the Second Millennium there seems to have been an isogloss linking Egypt, Phoenicia, Greece and Lycia in this respect. If these changes can be causally linked, they would seem to have started in Egypt spreading elsewhere in the eastern Mediterranean between 1700 and 1300 BCE.

11. FORMATION OF PROTHETIC VOWELS. Although prothetic vowels occur in many Indo-European languages, they are much more frequent in Greek than elsewhere.⁹⁶ As these have not been reconstructed for PIE, it is believed that most of those found in "daughter" languages derive from lost laryngeals. Another source stems from a reluctance to begin words with complicated consonant clusters. It is often difficult to distinguish between these two sources. For instance, there has been considerable debate about whether the prothetic letters found in many languages before words for "name" (e.g., the Greek *ónoma* and the Irish *ainm*) come from a lost laryngeal *Hnm(n) or from the reduction of a root *nmn to zero grade that bring the initial n- and the medial -m- together, forming an intolerable initial cluster.⁹⁷ Historical linguists are less concerned with the Greek prothetic vowels deriving from these two sources, which can be found in other Indo-European languages, than they are with the exceptional number found in Greek.⁹⁸

The only Indo-European language with a similarly high number of these vowels is Armenian. Indeed, this seems to have been a principal reason why Greek and Armenian have been considered to have a special relationship within Indo-European.⁹⁹ James Clackson, who has written the latest monograph on the relationship between Greek and Armenian, denies that parallels between prothetic vowels in the two languages can be used to show any exclusive relationship between them.¹⁰⁰ In any event, of the eight words that he admits as possible indications of this formation, one *ast-* “star” was, as we saw in Chapter 4, common to Indo-European.¹⁰¹ For the complications of another form *erek* and the Greek ἔρεβος (H) “evening,” see below.¹⁰² The parallel between the Greek ὀνειδος (H) “reproach” and the Armenian *anek’* “curse” is loose both semantically and phonetically. The remainder could well be early loans from Greek into Armenian.

Most plausibly the high incidence of prothetic vowels in Greek can be explained by the large number of Egyptian or West Semitic loans or copies into Greek. These loans or copies most likely either had prothetic vowels in the source language or began with the Afroasiatic consonants [>]*aleph* and [>]*ayin* which did not exist in Greek and were, therefore, reduced to prothetic vowels. Sometimes the Egyptian /h/ or even /ħ/ reduced to zero. Finally, they could derive from Late Canaanite which had a tendency to drop the initial h-, notably from the definite article *ha*.

Furthermore, Egyptian, Semitic and Hurrian all have prothetic vowels with these and other consonants usually attached to avoid difficult initial clusters. In Egyptian these were seldom written and their quality is uncertain.¹⁰³ They were written with an /i/, which though undoubtedly short could have been rendered [>]a-, [>]e- or [>]i-. In Canaanite the vowel generally seems to have been an e-.¹⁰⁴ The Greek and Armenian prothetic vowels, however, also generally varied between a- and e-, although forms with o- do appear.¹⁰⁵ At this point, I shall only attempt to give examples of the various types.

First come borrowings from [>]*aleph*, starting with ἄλφα (4) itself. The Greek ἡμαρ “day,” originally pronounced ḥmaṣ (H) and originally meaning not “day” but “fate of the day,” derives from the attested Egyptian form *imy hrw* “guardian of the day.”¹⁰⁶ The Greek medical term ἰνᾶω “evacuate, purge” would seem to come from the Egyptian medical term *ini* “remove.” Then there is ὀθόνη (H) “fine linen, sails, shrouds” and the Canaanite [>]*ēlūn* “linen of Egypt, thread, cord,” itself from the Egyptian *idmi* “red linen.”¹⁰⁷ The Late Greek οὐραϊος (CE5) derives from

the Egyptian *iʿrt* “Uraeus.” Finally, the attested Late Egyptian form *ikm* from *km* “completion” provides a good etymology for ἄκμη (H) “highest or culminating point, full grown.”¹⁰⁸ Two twentieth century lexicographers of Greek, the Swede Hjalmar Frisk and the Frenchman Pierre Chantraine, link it to what they see as an Indo-European root *ak- “sharp.” Chantraine, however, admits that he can find no parallel for the development ἄκ-μῆ.

As examples of Greek prothetic vowels deriving from *ʿayin* there are ἀκριβής (4) “exact” from the Egyptian *q3 ib* “precise, straightforward” and ὄχλος (5) “crowd, many” from the Egyptian *ʿš3t* “swarm, crowd, many.”¹⁰⁹ Copies resulting from Afroasiatic forms beginning with /h/ or /ḥ/ include Αἰγύπτως Aikupitiyo from Ht k3 Pth, ἔβενος (5) from *hbny* and ἱβις (5) from *hby*.¹¹⁰

Finally, we come to Afroasiatic words that possessed prothetic vowels despite the fact that they were seldom written.¹¹¹ Scholars are divided as to whether Egyptian *s(3)q* “join together” or “sack” (*sok*, *sook*, *sak* or *sō(ō)k* in Coptic) was copied into Akkadian as *šakku* and Canaanite as *śaq* or the process was reversed.¹¹² Whether from Egyptian or Canaanite, it generated two Greek forms σάκ(κ)ος (4) and with a prothetic a-, ἄσκός (7).¹¹³

The Greek ἄσπίς (H) “shield” would seem to come from the Canaanite root *sph/y* “metal plate, cover” attested in Ugaritic, Hebrew and Neo-Punic. Ασπίς (5) “asp,” an Egyptian snake, almost certainly comes from the Egyptian *Sbi* “the rebel serpent” a well-known demon.¹¹⁴ Diodoros Sikeliotes reported that Egyptian priests had told him that the ancient Athenian name for their city ἄστυ (H) came from the city name *Asty* in Egypt.¹¹⁵ A town called *ist* existed in the Second Lower Egyptian nome and the temple of Ptah at Thebes was called *isty*. Anne Burton, in her commentary on Diodoros Book 1, denies the first town as an influence on the grounds that by classical times it would have been pronounced *Ēse. On the other hand, she accepts that the /t/ would have been preserved in the second example.¹¹⁶ I see no reason to date the hypothetical copying after the disappearance of final -t. Furthermore, the /t/ was clearly written and there is no reason to suppose that Diodoros’ informants were illiterate. As *astu* was not restricted to Athens, however, it seems to me more likely that *asty* is at least partially derived from the Egyptian *ist* “palace” or (*i*)*st* “place.”¹¹⁷ The Egyptian *irp* “wine” appeared in Greek as ἔρπι or ἔρπι(5). There is the clear-cut example of the Canaanite article creating a prothetic a- in the name of the highest

mountain in Rhodes **Ἀταβύριον** from *Haṭṭābôr the same as Mount Ṭābôr in Palestine.¹¹⁸ All in all, the high frequency of prothetic vowels in Greek does not have to be explained as a “genetic” peculiarity. It simply seems to have been the result of a large number of words accurately or loosely copied from Afroasiatic.

12. THE SHIFT FROM $\bar{a}$ TO $\bar{e}$. This shift occurred after the conventionalizing of Linear B and was never completed. It took place only in Ionian and, to a slightly lesser extent, Attic. All the other dialects preserved the Indo-European long $/\bar{a}/$. The lower date for the shift is set before the standardization of Homeric spelling in the Late Bronze Age. Many Indo-Europeanists accept some antiquity and recognize that the shift had ceased to operate before long $/\bar{a}/$ was created by contraction or new loans were introduced into the Ionian spoken in the south and east.

In Lycian, at some stage, $/\bar{a}/$ often became $/\bar{e}/$. The variation was not related to open or closed vowels, so stress or, more likely, vowel length might have been the basis. With vowel length, one cannot say whether it was the long or the short vowels that were affected because vowel length is not marked in the script. Vowel length would seem the more likely not only because of the Greek parallel but also because in Ugarit (whose population included many Luvian/Lycian speakers) $/a^>/$ (which later became $/\bar{a}/$) shifted to $/e^>/$.¹¹⁹ Although writers on Anatolian languages generally see the Lycian shift as having taken place in the First Millennium, it seems more plausible to me to suppose that the change took place in speech long before it was recognized in writing.¹²⁰ In any case, the Ugaritic shift had taken place by the fifteenth century, and it is striking that two contiguous languages, spoken under the Hittite political regime or sovereignty in the Second Millennium and under the Neo-Hittite principalities in the early part of the First Millennium should have gone through similar sound shifts.

It is also remarkable that to the south of Ugarit long $/\bar{a}/$ broke down in the famous “Canaanite shift” $\bar{a} > \bar{o}$, which, according to Zellig Harris, began “probably before the early fifteenth century.” A similar change took place in Egyptian during this period or a little later in what must be a related areal change within the Egyptian sphere of influence.¹²¹ Further shifts $\bar{a} > \bar{u}$ and $a > o$ took place later in Phoenician.¹²²

One striking example of the results of the different shift $\bar{a} > \bar{e}$ and $\bar{a} > \bar{o}$ comes from the two Greek words, whose similarities of sound and meaning intrigued Plato: **σῶμα**, genitive **σώματος** (H) “corpse” and **σῆμα**,

σῆματος (H) “tomb.”¹²³ The argument made by Plato and later lexicographers that *sēma* “tomb” came from **σήμα** (H) “sign” is semantically possible but improbable *sēma* “sign” is far more likely to derive from the Canaanite *sēm* “name, sign.”¹²⁴

In Middle Egyptian there was a term *smʒ tʒ* “unite (with) the earth.” This was used in two senses: “unite the land” and “be interred, burial” in Late Egyptian. Vycichl, who sees *smʒ tʒ* as having been used as a single word, reconstructs it in the latter sense of “burial” as **zamʒ-táʒ-*. Anglo-American Egyptologists would transcribe this **samʒ-táʒ-*.¹²⁵ Vycichl’s reconstruction seems plausible though the stress pattern may be less certain than he supposes. Not only does **samʒ-táʒ-* provide a plausible etymology for both *sēma*, *sēματος* and *sōma*, *sóματος*, but also it offers approximate dates for the borrowings. Evidence from both Egyptian and Greek indicates that the loans could not be earlier than the third quarter of the Second Millennium BCE. Clearly /ʒ/ had lost its consonantal quality. Equally, the initial s- indicates that the loan could not have been made into Greek before the conversion of initial *s* > *h*. Otherwise, it would have passed through that shift and become ***hēma*. At the other end, *sēma*, originally as the Doric form *sāma*, had to have been transmitted from Egyptian before the Ionic fronting /ā/ to /ē/ in the fourteenth or thirteenth centuries. Similarly, the loan of **samʒ-táʒ-* into the Greek *sēma*, *sēματος* took place before the Egypto-Canaanite shifts of long stressed /ā/ to /ō/. In a later form **sōma-toa-* or **sōmato*, it was borrowed to form **σώμα**, **σώματος**. Since both words are found in Hesiod and Homer, this can hardly be later than the ninth century BCE.

Another example comes from two derivatives of the Egyptian verb *ts* “knit together, marshal troops.” The word appears in Coptic as *jōis* “lord, Jesus” indicating an earlier **tās*. The noun *tsw* meant “commander, protector of the poor.” With the shift ā > ē **Tāsw* provides an excellent etymology for **Θησεύς** *Thēseús*, hero and legendary organizing king of Athens.¹²⁶

The Ionian shift would fit the picture given in Hittite documents of their relations with the **Aḫḫiyawa**, almost certainly Akhaians of the late fourteenth and early thirteenth centuries.¹²⁷ The difficulty with this is that the shift ā > ē did not affect Arkado-Cypriot, the most archaic Greek dialect closest to Mycenaean and presumably the language of the “Sea People” who settled on Cyprus in the late thirteenth and early twelfth centuries. This objection can be got around, with some additional encumbrance, by arguing that the Greeks, among the Sea Peoples, came

from the Peloponnese rather than the southern Aegean, but clearly this argument is not very satisfactory. It is, however, less implausible than proposing a shift in the Iron Age when the southern Aegean islands were occupied by Dorian speakers. If we are to believe Homer and the archaeological evidence, the dominant eastern influence on Akhaians and Danaans at this time was from Sidon and Tyre and in their dialects the accented long / $\tilde{a}$ / had many centuries earlier turned to / $\tilde{o}$ /.

In any event, apart from the possibility that any or all of these shifts could be unrelated, we have no clear indication that it was the long $\tilde{a}$ that was affected in Lycian or that this shift took place in the Second Millennium. Nevertheless, both suppositions would seem plausible and it would seem possible that the shifts $\tilde{a} > \tilde{o}$ and $\tilde{a} > \tilde{e}$ reflect, respectively, regions of Egyptian and Hittite influence during the Late Bronze Age.

13. THE SHIFT FROM W TO ZERO. The title of this section is somewhat misleading. One of the first great discoveries of classical studies came when Richard Bentley found the hidden *F digamma* or /*w*/.¹²⁸ Although /*w*/ was not written in Homeric Greek, its presence, or that of a reflex, was marked by the prohibition of elision of vowels previously sounded with it. *Digamma* does appear in a few Greek alphabetic dialects, and signs beginning with *w*- are also present in the orthography of Linear B. Nevertheless, the omission from the Ionian alphabet is significant. In Late Bronze Age Greek /*w*/ was clearly weakening and had largely disappeared except as a reflex in the First Millennium.¹²⁹ This change occurred more widely than that from / $\tilde{a}$ / to / $\tilde{e}$ / but was along the same general lines. It affected Ionian and Attic most strongly. In Arkadian /*w*/ disappeared medially but not initially. In some Dorian dialects no change occurred. Indeed, /*w*/ is still used in the Tsakonian dialect of Lakonia, which is descended from a Dorian dialect.¹³⁰ Many of these instances correspond with Indo-European roots containing /*w*/. Even when *F* is written in archaic dialects, it cannot always be traced back in this way. John Chadwick pointed out that in several instances the initial *digamma* found in classical inscriptions is not justified etymologically.¹³¹ In Chapter 9 below, I will propose that both explicit *F* and Greek loan words containing an Afroasiatic *'ayin* and some times even *>aleph* could prevent elision.¹³²

With this dialectal pattern one might expect to find analogies in the East Mediterranean. In fact, a shift *w* > *y* occurred in West Semitic. It took place between the establishment of the orthography of Eblaite and

that of Ugaritic *circa* 2600–1600 BCE. The shift's incompleteness in Ugaritic and the sporadic late survival of /w/ in Phoenician, however, would strongly suggest that it began near the end of this span.¹³³ In Late Egyptian, too, long /ū/ shifted to long /ē/.¹³⁴ A similar shift u>i is also found in Mycenaean Greek, although in no other dialect.¹³⁵

Here too the changes in Semitic and Egyptian are not identical to those in Greek. Furthermore, one should not place much significance on the weakening of an unstable phoneme like /w/. Nevertheless, it is interesting to note that the Greek dialects of regions that, on documentary, archaeological and legendary grounds, seem to have had most contact with the Levant in the Late Bronze Age, appear to have undergone a similar sound shift to the one described there. The shift w>ō is clearly related to the breakdown of labiovelars at approximately the same time which will be discussed in the next section.

14. THE BREAKDOWN OF GREEK LABIOVELARS, I: AN AFROASIATIC EXCURSUS. Before considering the breakdown of Greek labiovelars in the Second Millennium, we need to look more widely at labiovelars and rounded morphemes. They are very common among the world's languages. For instance, Christopher Ehret is convinced of a four-way set for Afroasiatic: *g^w, *k^w, P^w and k^w >.¹³⁶ Allan Bomhard reconstructs a full set of rounded velars *g^w, *k^w[h] and *k^{>w} for Proto-Nostratic. His case is persuasive at least as far as it concerns PIE, Proto-Kartvelian and Proto-Afroasiatic.¹³⁷

Labiovelars in Semitic. Two examples of parallel labiovelars in Indo-European and Afroasiatic strengthen this hypothesis. The linguist of Ethiopian languages Wolf Leslau tentatively proposed a Cushitic root *ək^wa for “water.”¹³⁸ Pokorny's Indo-European root is *ək^u-. The Semitic root √qwm “arise, stand up,” is q^wāmā in most Gurage languages. This corresponds well to the Indo-European root conventionally reconstructed as *g^uem but according to the emphatic theory was *q^wem, “come.” It is commonly believed that the labiovelars in Ethiopic Semitic derived from surrounding Cushitic languages. Interestingly their presence and that of other rounded consonants seems more marked in Ethiopic Semitic than in Cushitic. Thus, they are more likely to derive from Proto-Semitic. As I. M. Diakonoff wrote in 1970:

The Proto-Semitic-Hamitic (Afroasiatic) consonant series *g^u, *q^u, *k^u seems to be established reliably enough on the basis of Cushitic and Tchad data; but also in Semitic there is evidence pointing to

the original existence of these phonemes; apart from their existence in Ethiopic where they might perhaps be due to the existence of a Cushitic substratum. The fact itself that i>u not only in contact with *b, p, m*, but [in certain cases only!] also with *g, q, k* is significant.¹³⁹

Diakonoff was referring here to what he believed to be the fundamental bivocalism (*a/ə*), plus sonants) of pre-Proto Afroasiatic [Nostratic?].¹⁴⁰ According to this scheme, in Semitic, the /*a*/ stays constant but /*i*/ and /*u*/ represent variants of /*ə*/. Incidentally, this would mean that the Ethiopic /*ə*/ could be seen as primary and not secondary as is often supposed. According to Diakonoff's scheme of alternating /*i*/ and /*u*/, the Proto-Semitic initials **bə*-, **g^wə*- and **q^wə*- were rendered *bu*-, *gu*-, *qu*- in Hebrew and Akkadian but *bi*-, *gi*, *qi*- in Arabic with Aramaic being mixed. He saw **k^wə*-, and *mə*- as probably *ku* and *mu* in all languages except Ethiopic which retained the *k^wə*-.¹⁴¹

As far as it goes, Diakonoff's scheme is very tempting. To go further, however, it is necessary to find not merely more reflexes but actual examples of rounding in general and particularly in labiovelars within Asiatic Semitic. More reflexive evidence comes from an interchange between /*g*/ and /*b*/ known in various Canaanite dialects and now found in Eblaite, which the epigrapher and linguist and Giovanni Pettinato described as “*interessantisimo*.”¹⁴² He has not, so far, developed his thoughts on this, but they must include the possibility that the interchange represents a develarization of **g^w*- to become *b*-.

Further evidence of labiovelars appears to come from two generally archaic linguistic areas: personal pronouns and irregular verbs. The following chart of second-person singular pronouns omits apparently unrelated forms:

Second-Person Singular Pronouns

	Masculine		Feminine	
	Nom.	Acc. Obl.	Nom.	Acc. Obl.
Old Egyptian ¹⁴³	ṭwt (ind)			
Eblaite ¹⁴⁴	kuwāti	kuwaši		
Assyrian ¹⁴⁵	kuwati	kuaša		
Akkadian ¹⁴⁶	kāti	kāšim	kiāti	kiāšim
Eža (W. Gurage)				
acc. Hetzron ¹⁴⁷	h ^w ət		h ^y ət	
acc. Leslau ¹⁴⁸	xut		x'it	

The gender alternation C^w/C^y corresponds to the linguistic universal of /i/ signifying small, light and pretty while /u/ represents the opposite.¹⁴⁹

It is universally agreed that the Egyptian hieroglyph conventionally transcribed as /t/ originally derived from a velar /k/. Until recently it was also accepted that it came from a palatalized $*k^y$ -. Christopher Ehret, the specialist in African languages, forcefully argues, however, that /t/ derives from a Proto-Afroasiatic “lateral obstruent” $*k^w$ -.¹⁵⁰ Whether or not the examples he provides are convincing, the archaic Egyptian masculine form *twt* is much more plausibly derived from a masculine initial *kuw*- than from a feminine *kia*-, given the Semitic parallels. Against this derivation are the Egyptian second-person alternation *ntk/ntt* and many other examples suggesting an origin for /t/ from a palatalized $*k^y$, which is a much more frequent shift. The overall pattern indicates that Proto-Afroasiatic had an alternation $*k^w$ -/ $*k^y$ - in the second person. Additionally, $*s^w$ -/ $*s^y$ - in third-person pronouns suggest a labiovelar and a rounded /s^w/ (see below).¹⁵¹

As for the second-person forms, there is no reason to suppose that they are secondary. None of the surrounding Highland East Cushitic or Omotic languages have similar terms. The most plausible etymology would be from $*an\ k^wə$ and $*an\ k^yə$. There is an Argobba form *an kă*.¹⁵² Thus, all of these forms could well derive directly from the Proto-Semitic and be related to the Eblaite and Assyrian *kuwati*. The similarity of the form in these two languages, as opposed to *kati* in Akkadian, suggests that, although most Assyrian texts are more recent than those from the southern Mesopotamian ones, in this respect at least the Assyrian are more archaic. One possible explanation is the greater influence in the south of Sumerian, which had very little, if any, rounding.

What reason is there to suppose that *kuwa* represented $*k^wə$ rather than a bisyllabic $*ku-wa$? The only answers are the typological one that pronouns tend to be monosyllabic and the analogous one making comparisons with the Ethiopian Semitic languages. Another possibility is found in analogy with the third-person pronouns discussed below.

Another possible survival of labiovelars in Asiatic Semitic is in the fundamental verb $\sqrt{kəvn}$, *kuānum* “stand, exist” in Old Akkadian. Jacques Ryckmans provided the following paradigm for this verb in Assyrian and Babylonian:¹⁵³

	Permansive		Imperfect		Preterite		Perfect		Imperative	
	Ass.	Bab.	Ass.	Bab.	Ass.	Bab.	Ass.	Bab.	Ass.	Bab.
3m.	kèn	kìn	ikùan	ikàn	ikùn		iktùan	iktùn		
3f.	kênat	kînat	takùan	takàn	takùn		taktùan	taktùn		
2m.	?	?	takùan	takàn	takùn		taktùan	taktùn	kùn	
2f.			takunni		takûni		taktûni		kûni	
1c.			akùan	akàn	akùn		aktùan	aktùn		

The evidence from this, too, is ambiguous. While the imperfect would fit very well with a stem **k^wən*, in the perfect the /k/ and the /u/ are separated by an infixed /t/. Similar separations occur in derived conjugations, although they could have been formed by analogy. Taken as a whole, the paradigm is clearly mixed. The problem is whether it is better seen as a triliteral with a weak medial /w/ or as a biliteral modified in some ways to conform with triliterals. Diakonoff argued that if the medial *y* had originally functioned as a consonant one would expect an imperfect form ***kayan*.¹⁵⁴ Another argument along the same lines is that, while the Akkadian non-past regularly geminates the second consonant, the *y* is not doubled but the final /n/ is when it is followed by a vowel.¹⁵⁵ This indicates that it was seen as the second consonant, preceded by a single /k^w/.

Arabic has the same ambiguity, there the medial *y* is doubled in the derived forms, such as *kawwana*. Here too there are indications that the root may have been **√k^wən* rather than **√kwn* or **√kawn*.

Arabic		Kāna Perfect	
3m.	kāna	3mp.	kānu
3f.	kānat	3fp.	kunna
2m.	kunta	2mp.	kuntum
2f.	kunti	2fp.	kuntunna
1c.	kuntu	1cp.	kunna

The vowels /ā/ and /u/ occur in open and closed syllables respectively. The usual explanation given for the alternation has been to suppose that both derive from a diphthong **aw*. However, it is also generally considered that, as Zellig Harris put it,

In early Semitic, diphthongs were phonologically vowel + syllable closing [y] or [w]; as such they were always either final or followed by the consonant which began the next syllable: [bāytu]. Since every

syllable in early Semitic began with a consonant, inter-vocalic [y] and [w] must be considered phonologically as hetero-syllabic not making a diphthong, but rather beginning the next syllable.¹⁵⁶

In this case there would be no distinction between open and closed syllables as they would all be closed. Thus, if such a paradigm were ancient it would be better explained as deriving from $\sqrt{k^w}n$ rather than from $\sqrt{k}wn$ or $\sqrt{k}awn$. In fact, a form of this type exists in the northern Gurage language Gogot, where one finds $k^w\ddot{a}n\ddot{a}$. The remote eastern Ethiopian dialect of Zway has the spirantized $x^w\ddot{a}n\ddot{a}$.

The loan of this word into the Greek, **κοινός** (H) “common, public, impartial” from the Canaanite $\sqrt{k}wn$ “establish, correct” indicates the same structure $\sqrt{k^w}n$.¹⁵⁷ Other examples of Canaanite and Egyptian rounded consonants appearing in Greek with the diphthong -oi- will be given in later chapters. Opposite examples occur. For instance, in Chapter 8, I will show that **φούβος** (H) does not derive from a hypothetical $\sqrt{p^w}ab$ but from P3 w^b .¹⁵⁸ Nevertheless, it is unlikely that $\sqrt{k}wn$ or $\sqrt{k}awn$ should have been rendered as *koinós*.

***G^wəbla/Biblos* and *G^we-Dēmēter.** Other parallels between West Semitic and Greek are best explained by seeing them as loans into Greek that occurred when both languages still possessed labiovelars. Later, they went through the regular sound shifts undergone by Greek consonants. The famous Phoenician city known in Akkadian as Gublum is attested as early as the Third Millennium in the Egyptian Kbn. In the Middle Kingdom it appeared with  (R5) the trilateral $k\ddot{z}p$, as $K\ddot{z}pny$. The suggestion of a /3/ is reinforced by an Eighteenth-Dynasty form written with a  $k\ddot{z}$ -.¹⁵⁹ $K\ddot{z}$ - in this case possibly indicates a labiovelar, as it will be argued below that  could represent / k^w /.¹⁶⁰ This, in turn strengthens the hypothesis that the Semitic form contained a labiovelar. In fourteenth-century Canaanite, the city name was written Gubla and through normal sound changes became Gəbāl in Hebrew and Jəbeil in Levantine Arabic. In 1950, the Semitist and ancient historian William Albright proposed that Greeks had heard Gubla/um as $\sqrt{G^w}əbl$ or $\sqrt{G^w}ibl$ before the breakdown of the Greek labiovelars. As it is known that in most Greek dialects g^wi became *bi*, this would explain the puzzle of why the city name Gubla was rendered Βίβλος Biblos or Βύβλος Byblos in Greek.¹⁶¹ I maintain that it would be easier to accept the transfer if Canaanite too

had possessed labiovelars and that the Greeks had actually heard *G^wibl.

Another example is the name Demeter **Δημήτερ**, Dēmēter(H). Before coming to her, however, we should consider the word **γῆ**(H) “earth” and its longer doublet **γαῖα**(H). These two have no Indo-European etymologies and scholars cannot even see how the two can be related. In the middle of the twentieth century, the Semitist Marcel Cohen suggested that *gē* could be derived from the Ethiopian *ge* “land, country.”¹⁶² I proposed this, independently in Volume 1, linking *gaia* to the Canaanite full form *gay* > “wide valley” and *gē* to its construct form *gē*>, thus explaining the Greek doublet.¹⁶³ As Saul Levin pointed out thirty years ago, the vocalization of *gay* > is unique in Canaanite.¹⁶⁴ In his *Dictionnaire des racines Sémitiques*, David Cohen subsumed it under a root √gww/>, as in the Arabic *ǧūwā*>. The possibility that this derived from *g^we is increased by another proposal, of Marcel Cohen, that the common south Ethiopic title *g^weta* (*g^wäyta* in the northern Tigrinya) “master, landlord” derived from *g^we “land” with the personal suffix -ta.¹⁶⁵

Although well established in Homer, neither *gaia*, which is far more frequently used in the epics, nor *gē* has so far been attested in Linear B. The same is true of the name Demeter. Nevertheless, the divine name appears to be very old. Neither ancient nor modern scholars have any difficulty with the second portion of her name -mēter “mother.” The problem has been the initial Dē-, although there is general agreement that it means “earth.” The standard word for that, however, is *gē*. The first vowel in the name is confusing in that, while the Dorian dialects have the expected **Δᾱμᾱτερ**, the Aeolic is **Δομᾱτερ**. Paul Kretschmer accepted the theory of the scholiasts that da- was simply an ancient name for “earth.”¹⁶⁶ Chantraine objects that the word does not exist except as an exclamation.

Another explanation would be to derive it from the Semitic. If the root √gww/> was originally *g^we in West Semitic it would have become *de in Greek through the regular pattern of the breakdown of labiovelars. The Dorian Dāmāter complicates the equation but, as it is not confirmed in Linear B, it could be a back formation. The Dōmāter in the generally conservative Aeolic could have been affected by the rounded *g^we. While the phonetic relationship could well be stronger, the semantics are perfect. The cases of Byblos and Demeter provide additional evidence to back the hypothesis that labiovelars can be safely reconstructed for Proto-Semitic. They undoubtedly existed in Proto-Afroasiatic and are present

to this day in Ethiopic Semitic. The evidence from Greek, however, strengthens the case for their having survived in Asiatic Semitic at least into the Second Millennium.¹⁶⁷

Labiovelars in Egyptian? Could labiovelars have existed in Egyptian? Against such an idea is the lack of any obvious Coptic or Greek attestation of them, and the complete absence of any Egyptological consideration of the possibility. Furthermore, the presence of labiovelars in Semitic does not necessarily imply that they existed in Egyptian, which was so much less archaic. On the other hand, Proto-Afroasiatic doubtlessly possessed labiovelars. Furthermore, a number of Babylonian transcriptions of Egyptian can be interpreted in this way and the vocalization -Coi C- in Coptic and Greek can be interpreted as a rendition of rounding just as *m^wa* is spelled *moi* and *k^wā*, *coin* in French. Finally, evidence is given later in this chapter of rounded *s^w* and *m^w* in Egyptian.

These arguments justify consideration of the possibility of labiovelars and the place to begin is the sign , transcribed *kʒ*. The semantics of the conventionally written *ka* and the possibility that *kʒ* was borrowed into Greek as *kēr* will be discussed below in Chapter 10.¹⁶⁸ Here we merely consider the phonetic value of  within Egyptian.

The vocalization of this sign at various periods is both complex and controversial. The German scholars Gerhard Fecht and Jürgen Osing maintained that Koiahk and Kiahk (S) Khoiak (B) and Kaiak (A), the Coptic forms of the festival named *kʒ* ḥr *kʒ* in Egyptian, indicated a stress on the second syllable and a reconstructed **kaʒ*.¹⁶⁹ Werner Vycichl disagreed. He argued that they neglected “no less than four arguments”: (1) the value of  in the syllabic orthography as *ku*; (2) the absence of palatalization, which would have taken place with **kaʒ*; (3) the maintenance of the vowel in the first syllable; and (4) the aspiration of the Bohairic form. In addition to these arguments, Vycichl refers to the Middle Babylonian (second half of the Second Millennium) transcriptions of  n *kʒ* “gold or silver vase,” as *zabnakuu* and  *kʒ* Pth “Memphis” rendered *Ḥikuuptaḥ*. Note the double /u/ in both cases.¹⁷⁰ Vycichl could have strengthened his argument by mentioning the Linear B form, *A₃kupitijo*, and the alphabetic Αἰγύπτιος. Nevertheless, the authoritative Fecht and Osing clearly had grounds, from the spelling of Koiak etc., to justify the presence of an /a/.

I believe that a solution can be found in the reconstruction of an original vocalization **k^w-(a)*. In another entry, Vycichl writes, “At the time in

question, [The Late Ethiopian period, seventh century BCE] 𐩺 is not *ka*, but an unpalatalized *k* close to or identical to 𐩺 [q] in opposition to the simple *k* 𐩻 [which was] lightly palatalized in most cases.”¹⁷¹ Such a definition would fit *k^w*- perfectly. This passage was written in the lemma to the Coptic word *ketōl* or *kutōl* “vessel for water,” with another spelling “cavern, hollow place,” both derived from *qrr*. The alternation of vowels suggests that here we might be dealing with an original *q^we-lōl. Thus, it is possible that as the consonantal /ʒ/ was lost 𐩺 was used not merely to transcribe foreign names as *ku* but also for Semitic words introduced into Egyptian.¹⁷²

The suggestion that 𐩺 was used to represent *k^w*- as well as *ku* is strengthened by three phenomena: first, an alternation of *ku* with *ka* in the group script; second, a Canaanite rendition of *ku* as *ka* or *qa*; and third, words rendered in the group script as *ku* appearing as *ka* in Coptic. As examples of the first type, there are the alternatives *kurti*/*karati* “whip,” *kurakura*/*karakara* “couch” and *kumaru*/*kamaru* “dancer,” and possibly the Hebrew *komer* “pagan priest,” further evidence of an original *k^wamer. The second phenomenon is represented by *kumasa* “cowardice,” which James Hoch links to the Mishnaic *kāmaś* “wilt, fade” and certain Arabic stems of the verb *kamasa*.¹⁷³ Then there is *Kur^aata* “caged.” Hoch reconstructs this word as a feminine passive participle *kalu^a ata as the biblical Hebrew *kālū* > “imprisoned.” Finally, there is *kurata* which Hoch derives from *karata “slaughter or sword.”¹⁷⁴ He links this derivation to the common Semitic root √krt and the Hebrew *kārat*. As an example of the third, there is the Coptic *kaji* “small bucket” derived a Semitic borrowing *kaḏa* (read *kuṣa* in group script). Černý relates this to the Aramiac *kūzā* “small jug.” Against this Leslau believes the Aramaic and similar Arabic forms to be loans from Iranian.¹⁷⁵

The hypothesis that signs generally read *ka*- could also be read *k^w*- is strengthened by a variant spelling of the city name Byblos/Gubla/ *G^wibl discussed above. However, the value of 𐩺 as *k^w*-a- was not restricted to Semitic names and loans. The Coptic word *ketōl* or *kutōl* has been mentioned above. There is also the ancient word related to *kʒ*, *kʒ* 𐩺, written with a bull and a phallus, “bull” was vocalized *ko* in Old Coptic and *ka*- and *kai*- in Greek transcriptions, indicating an earlier *k^wa, and of course *kʒ* 𐩺 itself.

All in all, it seems likely that Egyptian contained labiovelars even though the writing system was not normally able to express them.

Other rounded consonants. Neither Bomhard nor Orel and Stolbova reconstruct rounded sibilants for Proto-Afroasiatic. Equally, they are not recorded in Ethiopic Semitic where rounding is such a common feature of other phonemes. On the other hand, following Diakonoff's scheme of the two vowels /a/ and /ə/ with sonants, one might expect sibilants and they are attested in South Cushitic.¹⁷⁶ Furthermore, the chart of third-person pronouns, parallel to the one for the second person given above, strongly suggests that a rounded s^w also existed in Asiatic Semitic:

	Masculine			Feminine		
	Nom.	Acc.	Obl.	Nom.	Acc.	Obl.
Egyptian ¹⁷⁷	swt(ind)					
Eblaite ¹⁷⁸	suwa					
Assyrian ¹⁷⁹	sût	suâsu		sît		
Akkadian ¹⁸⁰	sû	suatî	suâsim	sî	siâtî	siâsim
Qatabanian	swt			sît		
Sabaean	hwt			hyt		
Arabic	huwa			hiya		
Ge'ez	wə ^h ətu			yə ^h ətu		
Eža (W. Gurage)						
acc. Hetzron ¹⁸¹	h ^w ət			h ^y ət		
acc. Leslau ¹⁸²	xut			xit		

Other evidence comes from Egyptian and Akkadian transcriptions of Canaanite words: **tawbib* “to draw back” as *sa-wa bi-bi*; *swl* “skirt, for horse?” *s-wa-r* and **šw^hibta* “vessel,” as *su₅-wi₂-b-ti* in Egyptian and *su-i-ib-da* in Akkadian.¹⁸³ The proposal is strengthened by the fact that the thirtieth sign in the Ugaritic alphabet, conventionally named *zu* and transcribed as *š*, was pronounced either as /s^w/ or *su*.¹⁸⁴

We are on safer ground when considering rounded labials. These are abundantly attested in Afroasiatic and other African languages. Interestingly, however, they have a relatively low profile in Omotic, Beja and Cushitic. This makes their strong presence in Ethiopic Semitic less likely to be an innovation than the preservation of a Proto-Semitic feature. For instance, the widespread Gurage form *b^wər* “main, important man” appears in the Akkadian *b^hər* which the semitist I. J. Gelb reconstructed as *būārūm* “strong.” However, for *B^həs* with an identical structure, Gelb posited *bāšūm* “ashamed.” In this case, too, the initial would appear to be a

rounded *b^w-. The Canaanite root is √bwš “shame” and, despite difficulties with the final sibilant, this would seem to be connected to the general Gurage b^wäs “moldy, one who does not keep himself clean, one who does not do things well.” There is a common Semitic root √bzz “seize, rape, pillage.” Bwäž(ž)ä is the name of the terrifying but fertilizing deity personifying thunder and lightning for the remaining pagan Gurage, who have not been converted to Islam or Christianity. Houses are protected from him by planting a stick from a tree struck by lightning in front of the gate.¹⁸⁵ It is, therefore, interesting to note that one of the pillars erected in front of the Jerusalem temple (and presumably those in front of other Canaanite temples) was named Boʿaz.¹⁸⁶

Finally, there is the form m^wätä found in the Gurage languages of Gogot and Soddo and belonging to the Afroasiatic root that Orel and Stolbova reconstruct as *mawut “to die.” This form could well be reflected in the alternation between the general Asiatic Semitic √mwt and the Akkadian mâtu. I. J. Gelb reconstructed the verb as müätum.¹⁸⁷ Stronger evidence of the survival of rounded /m/ in Egyptian comes from the Akkadian transcription of the culturally central Egyptian concept of m3ʿt as mua. (The loan of m3ʿt into Greek as moira will be discussed in Chapter 10 below.¹⁸⁸) Another rounded labial can be seen in Gardiner’s plausible reconstruction of the root dpt “boat” as dap^wat.¹⁸⁹

In Ethiopic Semitic and many other languages there is a frequent alternation C^{wa}/Co. Thus, it is possible that the so-called Canaanite shift, ā>ō, which affected both Canaanite and Egyptian near the end of the Second Millennium, was stimulated by the breakdown of the rounded consonants, which by analogy pulled unrounded syllables with them.¹⁹⁰

It is probable that labiovelars and rounded labials existed in Asiatic Semitic and Egyptian well into the Second Millennium but that they broke down later. The question remains how this breakdown related to the one that took place in Greek in the same millennium.

14B. THE BREAKDOWN OF GREEK LABIOVELARS, 2. That *G^wibla and Demeter were introduced into Greek before the breakdown of labiovelars and γαῖα and γῆ after, tells us nothing about the dates of each shift. Two clues, however, indicate an earlier breakdown in Greek. The first of these comes from the name Γύης the mythological name of a son of Ouranos and Gaia.¹⁹¹ The term γύης which was glossed by the lexicographer Hesychios in the fifth century CE as “measure of land” or “the

land itself.” Chantraine links this to *γύη* *gýē* a curved piece of wood in the plow, in the sense of “plowland.” However, *gýēs* could also be a loan from the Canaanite **g^we* when the labiovelar was still retained in that language but had already been lost in Greek. Or it could be the result of confusion of the two sources. Similarly, the Greek *γύαλον*, “hollow,” sometimes describing a vase, came from the Semitic root *√gwl* “round hole,” which can be rendered with a *g^w-* in South Ethiopic Semitic. After the breakdown of the West Semitic labiovelars, the Canaanite *gullāh* was borrowed again as *γωλέος* “hole, lair,” *γαῦλος* “Phoenician ship,” *γαυλός* “bucket” and *γαυλῖς* “oil lamp.”¹⁹²

The dates of the Greek breakdown will be raised again in Chapter 9 in the discussion of the word *basileus*. All that will be said at this point is that the Greek Shift, which had nothing to do with the earlier shift in the satem languages, can be dated, using the arguments set out for subheadings 11 and 12 above, to the period 1600–1300 BCE. The evidence from Semitic loans suggest that there was a period after the Greek loss but before the Canaanite one. Since labiovelars do not appear to be present in Iron Age Phoenicia, the date of the Greek breakdown probably comes at the beginning of the range suggested. The date of the breakdown will be discussed further in Chapter 9.¹⁹³

As in the previous two cases, the Hellenic and Semitic shifts differed greatly from the Egyptian. Like the Indo-Aryan, Armenian, Albanian and Balto-Slavic satem languages, the Hellenic and Semitic simply delabialized *k^w>k*.¹⁹⁴ In Greek /*k^w*/ broke down in various ways, most commonly into /*p*/ before /*a*/ and /*o*/; /*k*/ before /*u*/; and /*t*/ before /*e*/ and /*i*/. It seems in fact to have been closer to Lydian, where /*k^w*/ universally went to /*p*/, and Lycian, where the resulting consonants appear to have been *t* and *k*.¹⁹⁵ An Aegean-Anatolian isogloss seems to be formed. However the possibility that /*k^w*/ sometimes became /*p*/ in Semitic and the great variations among Greek dialects, however, may lessen its significance.

There is, however, a much more serious objection to imposing a simple-minded formula based on the Ancient Model: that the Greek labiovelars broke down because the Afroasiatic conquerors were losing theirs. As with the shift *tʿ* to *s*, it probably took place in the Aegean before it did in Canaan. Thus, one would have to posit the more complicated hypothesis that the general linguistic confusion of seventeenth-century BCE Greece led to the system’s collapse there. Meanwhile, in the Levant the chaos of the invasion of the Sea Peoples, mostly Greek and Anatolian

speakers who had lost their labiovelars, caused the breakdown in Canaanite.

15. THE SHIFT FROM /u/ TO /ü/. This shift appears to have taken place somewhat later than the others and, like that from /ā/ to /ē/ (no. 12), it was initially restricted to East Ionic and Attic and not found in other dialects until Hellenistic times. The usual period given for this shift is the seventh or sixth century BCE.¹⁹⁶ Scholars proposing this dating, however, are limited by the conventional dating of the introduction of the alphabet to the eighth century because the alphabetic Greek υ originally represented /u/ before the change to /ü/. If, however, as I and others have argued, the date of the introduction of the alphabet is raised to the Second Millennium, this limit no longer applies. In 1940 Edgar Sturtevant suggested that the shift /u/ > /ü/ could have been much earlier.¹⁹⁷

Phoenician, though not Hebrew, also went through a similar shift /u/ > /ü/. This seems to have been a development of a long-term “chain shift” beginning with the Canaanite shift accented long /ā/ > /ō/. A later Phoenician shift went from stressed /á/ > /o/ (very possibly through /ā/, *qāmāš*, phonetic /ɔ/). The resulting /o/ did not merge with the one derived from the Canaanite shift. The letter was then “pushed” or “dragged” to /u/. This movement, in turn, forced the original Semitic /u/ to become /ü/.¹⁹⁸

The question remains whether the Semitic and Greek shifts /u/ > /ü/ could be related. The type of chain shift in which back vowels move to the front is extremely common and has been found in a large number of Indo-European languages. Thus, the developments in Phoenician and East Ionic could well have been independent. The divergent shifts /ā/ > /ō/ and α > η, referred to above (no. 12), indicate an Anatolian-Greek axis as opposed to an Egypto-Canaanite one. They correspond politically to the Egyptian and Hittite spheres of influence in the fourteenth and thirteenth centuries. Phoenician-East Ionic linguistic contact would fit the period after the crisis of the Sea Peoples at the end of the thirteenth century, but before the Dorian domination of the southeast Aegean, in the tenth and ninth, that is to say in the twelfth and eleventh centuries when speakers of East Ionic and Phoenician were in close contact. If one can make the connection, it would seem more likely that the Phoenician shift /u/ > /ü/, which was part of the larger chain sketched above, was the earlier and initiating change.

CONCLUSION

The phonological changes that took place between the disintegration of Indo-European and the earliest attestations of Greek cannot be the results of any single cause. The loss of laryngeals and the shift from emphatic to voiced stops occur in many other branches of Indo-European and must be explained in terms of internal developments. The split and merger of stops and aspirates is a peculiarity of Greek. Most of the remaining shifts occurred in neighboring languages and appear to have been the result of areal developments. Many of these—including the weakening of /s/, the shift from y>a and the loss of final -t—are frequent in languages throughout the world and too much significance cannot be placed on them. Some, like the shift from tʷ>s and the breakdown of labiovelars, may have taken place earlier in Greek than in Afroasiatic. Furthermore, the replacement of -m by -n and the Ionian shift from ā>ē point to Anatolian rather than Egyptian or southwest Asian influences. Apart from the dialect shift /u/>/ü/, the only phonological features of Greek that can be specifically linked to Afroasiatic is the frequency of prothetic vowels and this development is more properly seen as lexical.

CHAPTER 6

THE GREEK LANGUAGE IN THE MEDITERRANEAN CONTEXT

Part 2, Morphological and Syntactical Developments

This chapter is concerned with the middle of the spectrum of changes expected in a language that has experienced substantial, but not overwhelming, influence from one or more other languages. In Chapter 5 we saw how insignificant outside influence was on Greek phonology. From Chapter 7 on, we shall see the massive influx of Afroasiatic words and names into the Greek vocabulary. In this chapter, we shall see a few instances of morphological forms taken from Semitic or Egyptian and rather more syntactical changes often brought about by lexical borrowings.

MORPHOLOGY

1. Loss of nominal cases

The drastic loss of cases in early Greek has been mentioned. In Armenian the opposite occurred probably because of the high level of inflection in the non-Indo-European languages surrounding its later home. Early Anatolian languages, by contrast, lacked dative-locative cases and the full nominal system found in Indo-European proper.¹ Thus, an Indo-Hittite “pre-Hellenic” substrate might have exerted pressure on Greek to lose cases. Just as likely, however, the influence could have come from Afroasiatic. In fact, this possibility is more likely because during the Second

Millennium Canaanite, which had started with only three nominal cases, was generally reduced to one. This process seems to have been completed in the construct state by the fourteenth century and some time later in the absolute.² More likely this change was the result of Egyptian influence. In Egyptian case had no markers, with the possible exception of the nominative, since writing began in the Fourth Millennium. Thus the breakdown of the Greek declension can be attributed to either substrate or areal influences or both.

2. *The Greek oblique duals -οιiv and -αιiv*

The Oxford linguist L. R. Palmer, in his authoritative *The Greek Language*, wrote, “The Greek-οιiv, has no parallel elsewhere [in Indo-European].”³ Saul Levin easily explains this. He has clearly demonstrated that the genitive and dative dual suffix -oiin, common in Homeric Greek, although not attested in Linear B, came from the Canaanite dual accusative and genitive *-ayim. Although the Ugaritic accusative-genitive suffix was -ēm, the Arabic is -ayni and the Hebrew and presumably Canaanite -ayim, used for all cases, is generally thought to have originated from the oblique ending.⁴ The difference between the final mimation in Canaanite and the nunation in Greek can be explained in one or two ways. On the one hand, the original form could have been the final -n in the dual. This form is universal in Asiatic Semitic; Canaanite was the only exception. If this were the case, the copying into Greek took place before the change in the Levant.⁵ On the other hand, perhaps Greek simply did not tolerate final -m. It is striking that not only does the Greek -oiin have no parallels in any other Indo-European language but only one other instance of confusion of the two cases occurs in the family—the singular of nouns, not pronouns, in Armenian. Thus, Professor Levin’s claim would seem to be irrefutable.

3. -θεν

This proposed borrowing is less secure than the others. In Greek the adverbial suffix-θεν denotes motion from a place. Although it is common in Homer, it has no analogy in any other Indo-European language.⁶ Two possible Egyptian sources exist. The first is the Middle Egyptian interrogative, *tn* “where?” or “whence?” The second comes from the fact that in the eighth century BCE, both hieroglyphics and Demotic have

the forms *n tʒy-n* “starting from” written later in Coptic as *jīn* Sahidic(S) and *isjen* Bohairic (B).⁷ Although the semantic and phonetic fits are excellent, a serious syntactic problem arises in that there seems to be no instance of the word’s having been affixed to a noun. Nevertheless, in the absence on an Indo-European etymology, an Egyptian origin should be entertained as a genuine possibility.

4. -ΕΥΣ

The problem of the origin of the suffix -ΕΥΣ the one or the man who” is hotly debated. The existence of such words as *hippeús* “horseman” based on *hippos*, the Greek word of Indo-European origin, shows that the suffix was active during the Mycenaean period. On the other hand, the classicist Joachim Schindler admits both that there are no direct parallels to it in the rest of Indo-European and that most of the stems to which it is attached are non-Indo-European. Nevertheless, he insists that the suffix is Indo-European.⁸ Faced with the same problems, Szemerényi and Perpillou see the suffix as an innovation within Greek.⁹ Such an innovation can easily be explained if it is seen as a loan from the suffix -w found on Egyptian participles and “relative forms,” which when standing as nouns mean “the one” or “ones who.”¹⁰

As mentioned in Chapter 5, one aspect of the general Egyptian vowel shift in the thirteenth century BCE was from long stressed /ū/ to /ē/.¹¹ In 1923 William Albright suggested that this shift went through a stage */eu/.¹² Thus, on both the semantic and the phonetic grounds the evidence for such a borrowing is very strong.

SYNTAX

If relatively few phonological or morphological developments in Greek can be attributed to Afroasiatic influences, more extensive changes from Afroasiatic can be found in syntax or, rather, in some lexical items central to the patterns of Greek syntax.

1. Sources of some common Greek conjunctions, adverbs and particles

Three of the most common words in Greek are γέ(H), γάρ(H) and καί. Neither *kai* nor *ge* has an Indo-European etymology and γάρ is derived

by Chantraine from $\gamma\epsilon + \alpha\alpha$.¹³ As conjunctions neither *kai* generally translated as “and” nor *gár* “in fact, indeed, for” can stand at the beginning of a clause and *gár* “is usually placed after the first word in its clause.”¹⁴ As a postpositive and enclitic particle *ge* intensifies or restricts the noun, phrase or clause that comes before it.

Middle Egyptian has a frequent enclitic *gr*, later *grt*, emphasizing the preceding word. It is often not translated by Egyptologists but sometimes is rendered as “now, also.”¹⁵ Even though both the Greek and the Egyptian clusters have wide and vague semantic ranges, their ranges are remarkably similar in terms of both semantics and syntax. Phonetically, the correspondence between *gr* and *grt* and *gár* is excellent. That between the Egyptian words and $\gamma\epsilon$ is strengthened by the Sahidic(S) Coptic rendering of *grt* as *če* or Bohairic (B) as *je*. Thus at least three of the key structural elements in Greek syntax appear to have derived from different stages of the Egyptian language.

Kai (H) “and” is one of the most frequent words in Greek, and yet according to Chantraine its etymology is “unknown.” Frisk favors a “pre-Greek” origin. The Egyptian word *kyy* “other” is not a full adjective but only an “apparent” one in that it was originally a noun. Therefore, as a noun in apposition it preceded the noun rather than following it as was normal for qualifying adjectives. In Late Egyptian, Demotic and Coptic *kyy* developed later meanings of “also, again.” Sethe reconstructed the masculine form as **kēje*.¹⁶ As a proclitic it was pronounced *ke-* in most Coptic dialects and *kai-* in Lycopolitan (L) in Middle Egypt.

The frequent particle **oûn** (H) or **ōn** (H) has a wide and ill-defined semantic range in Greek. It can be used to confirm statements or to point back to something stated earlier or already known. It is often combined with other particles or conjunctions, including *δε* (H), *ἄλλα* (H), *gár* or *gé* to mean “in fact, at all events, even if.” It is also used to continue topics or to resume those that have been interrupted. Syntactically, it is postpositive, appearing after the statement to which it refers. Attempts have been made to derive it from the Greek root *ὄν* “to be” found in the participle *ὄντ-* and the derived form *ὄντ-* “truly.” Chantraine, however, objects to this etymology because of “insurmountable difficulties” and states that the origin of *oûn* is “unknown.”

In Late Egyptian there is a particle *ʿn* that derives from the verb *ʿnn* “to turn around.” On its own, *ʿn*, which was rendered as *on* in Coptic, means “again” or “already.” The notion of repetition as emphasis is found in many languages and specifically in earlier Egyptian. There the

dual suffix *-wy* is attached to a modifier in such sentences as *binwy ni* “how bad things are for me.” In Late Egyptian and Coptic *ʿn / on* was usually postpositive.

The most likely solution to this tangle is that the Greek *oûn* derived from three sources: First, it came from *ʿn / on*. This derivation could explain its emphatic and resumptive uses. *Oûn* was also influenced semantically by the Greek *ōn* to give it the sense of “in fact, truly.” The Egyptian word for “to be,” however, was also *wn / un*. *Wn / un* by itself cannot be the origin of *oûn* because, unlike *ʿn / on*, it always appears before the topic. The striking similarity between the Egyptian *wn / un* “to be, there is/are” and the Greek *ōn* and *ónt-* “to be” appears to be a coincidence. The parallel with the two Egyptian forms *ʿn / on* may have led to the psilosis or dropping of the initial /h/ from *ōn* that one would expect in relation to other Indo-European words. This would explain Chantraine’s problems with the phonetics. The later philosophical sense of ὄντος “substance, reality” was almost certainly influenced by the remarkable coincidence of the Egyptian *wn* and *wn m3ʿ* “reality” with the Indo-European form.

2. *Αὐτός*

Autós (H) “the same, him, it” substitutes for the oblique cases of the third-person singular in Greek. The lexicographer of Greek, A. J. Van Windekens writes in the lemma concerned with this form, “one finds oneself in front of a word which has not received a plausible explanation.” He cites a number of scholars to this effect.¹⁷ Van Windekens then proposes a derivation from the Indo-European *atma “wind, breath, soul, self.” “Self” is not a meaning given to it by other Indo-Europeanists.¹⁸ This etymology is as shaky in its semantics as it is in its phonetics.

In this case, too, one should consider the possibility of an Afroasiatic origin. Saul Levin has pointed out that the Hebrew *ʾōtô* “him, it”:

has no clear Semitic cognates nor has the Greek *αὐτό* in IE apart from Phrygian (which is very meagerly attested). But this Hebrew and this Greek pronoun have a lot in common with each other. Not only are they close in sound, but to a considerable extent they function the same—so much so that in the Septuagint the Greek word serves readily as just the right translation for the Hebrew.¹⁹

Naturally, Saul Levin points out that in both languages the ending is modified for gender: the Greek masculine *autós* and feminine *autē* and

the Hebrew feminine *’ōtāh*. He sees *’ōtō* and the Greek neuter *autó* as the basic forms. In considering the likely Indo-Europeanists’ objection to any connection between the two words (on the grounds that the *auto* must originally have ended in *-od* from a common Indo-European neuter ending in *-d*), he finds it more likely that a borrowing from the Canaanite masculine *’ōtō* would be seen as a Greek neuter by analogies to other Greek forms with clear Indo-European etymologies, such as *to* “that” and *allo* “other.”²⁰

Levin also considers the Greek system *houtos*, neuter *touto* “this.” His assessment of the standard etymologies is scathing: “They note the lack of IE cognates but still posit a sort of compounding of a sequence of IE morphemes whose semantic vagueness would permit nearly any possibility.” Levin suggests instead that “all the other Greek case-forms would have arisen from the absorption of *αὐτό/αὐτός/αὐτή* into the Greek morphological system.”²¹

3. *The development of the Greek definite article*²²

One of the striking late features found in both Canaanite and Greek is the definite article “the.” Definite articles are present in most European languages, as well as in Hebrew and Arabic. From the point of view of the thousands of languages that exist or have existed in the world, however, such articles are restricted to these Indo-European and Afroasiatic languages. In fact, all definite articles in the two families can be attributed to a single innovation.

Ancient Egyptian, like nearly all of the world’s languages, had demonstrative adjectives of the type found in the English “this, that, these, those”: *pn*, *tn* and *nn n(y)* and *pf*, *tf*, and *nf n(y)* (the masculine, feminine and plural forms). These words were placed after the noun that they modified. During the Middle Kingdom from the twentieth to the eighteenth centuries BCE the Upper Egyptian dialect of Thebes developed the reduced forms *pʒ*, *tʒ* and *nʒ n(y)* which were placed before the noun and were used with the weakened sense of “the.”²³

Middle Egyptian, the spoken language of the Late Old Kingdom and the Middle Kingdom remained the “classical” written language of Egypt for two thousand years. With the triumph of the Eighteenth Dynasty from Thebes, however, Southern Egyptian became the standard spoken language of the New Kingdom.²⁴ The definite article was a leading char-

acteristic of the new speech. From Southern Egyptian the definite article was adopted, along with the other linguistic modifications, into Canaanite. Ugaritic, written and probably conventionalized around the middle of the Second Millennium BCE in the north of the Levant, shows no trace of definite articles. Their relatively early presence in Canaanite suggests that they were adopted, in the Egyptian sphere of influence in the southern Levant, after the conquests of Tuthmosis III in the fifteenth century BCE.

The absence of the article in biblical (as opposed to later Hebrew) and early Greek verse could be explained by the demands of the literary form and as archaic. Poetry in Arabic or later European languages, however, does not appear to have had any problem with definite or indefinite articles. More than likely they were absent from Hebrew and Greek verse because verse forms had been established before the introduction of the article.

As in Late Egyptian, the Canaanite definite article developed from the “near” demonstrative *ha*, presumably from an earlier *sa*, as a calque from, or analogous to, the Egyptian *p3* and *t3*. Saul Levin has made a valiant attempt to link the /t/ in the oblique forms of the Greek article to *t3*.²⁵ This seems to me unlikely because, first, the initial t- in the Greek oblique terms can be explained in terms of Indo-European and, second, because evidence from Coptic and loans in Greek suggests that the masculine *p3* tended to replace the feminine *t3*.

Saul Levin, has long seen a close relationship between the Greek and the Hebrew definite articles and their ultimate derivation from Egyptian. He was the first to point out that Canaanite and Greek are unique in applying the definite article to both the noun and its modifier.²⁶ Thus, in Hebrew one finds sequences like *hā'is hattôb* literally “the man the good” i.e. “the good man.” This special characteristic also exists in Greek, as in *ho anthrōpos ho agathós*, which indicates that Greek did not take the form directly from Egypt but from Canaan or, more specifically, from Phoenicia. No doubt this loan ties Canaanite and Greek together in a way they do not share with Late Egyptian. Levin now maintains that the definite article “spread from Egyptian to Greek and then from Greek to a Semitic language in the neighbourhood of Egypt.” The essential basis for this, as he admits, “round-about” scheme, is that “within the Semitic languages, no demonstrative pronoun is known from which such a prefix could readily have been developed.”²⁷ This last statement is puzzling because the conventional view is, as the twentieth-century linguist and

semitist, Zellig Harris described Phoenician, “as throughout Semitic, the pronouns of the third person, which were originally demonstratives, may be used with demonstrative force: *ha* “that” and *hmt* “those.”²⁸ Later writers have been more specific: “Distant demonstratives are identical with the third-person personal pronoun: *h* ‘that’ and *hmt* ‘those.’”²⁹ In the earliest Hebrew prose one finds a definite article *ha* (and doubling of the initial consonant) placed in front of nouns instead of after them in the position of the demonstrative adjectives.³⁰ Other Semitic languages, such as Aramaic and Arabic, also developed definite articles from demonstratives. Arabic followed Canaanite in placing them before the noun but Aramaic placed them after it. All in all, no good reason exists to deny the geographically and historically sensible route: the definite article spread by calquing from Egypt to Canaan and on to Greece.

Latin has no definite article but all of its descendants, the Romance languages, do, presumably as the result of calquing from languages that did possess them. In the eastern provinces of the empire Greek and Aramaic would have provided the article. Punic, the form of Phoenician spoken in Rome’s great rival Carthage and many other cities in the western Mediterranean, could have supplied the article to other daughter languages. Thus, Portuguese uses *o-* and *a-* from the Latin *hoc* and *haec*, while the other Romance languages use forms like *il*, *el*, *la*, *le* derived from the Latin *ille*, *illa* “that” or “yon.” *Ille* itself presumably comes, through Punic, from the demonstrative *>ēlleh* found throughout Semitic.³¹ It was also used to form the definite article *>al* in Arabic. This calque explains the remarkable similarity between the Arabic and Spanish words for “the”: *>al* and *el*.

During the first centuries CE, the definite article spread north and east into the Germanic languages.³² Once again the spread was through calquing. Although the historical process is complicated in English, there is no doubt that “the” is a modified form of “that.” The only marked division among the Germanic languages is found in the Scandinavian languages, which like Aramaic, Albanian, Bulgarian and Romanian put the article after the noun rather than before it. Some Western Slav languages adopted the definite article, but its advance stopped short of Russian which, like Latin, does without. The whole process, lasting more than three thousand years, can be traced back to Upper Egypt during the Middle Kingdom.

The Greek article was calqued from Canaanite well after the language’s initial development. In the *Iliad* and the *Odyssey* what later became the

article largely retained its demonstrative force. As Meillet and others have shown, however, sometimes the function of *ho*, *hē*, *to* was virtually that of an article. Meillet plausibly suggests that the words were already beginning to be used as articles when the epics were composed following ancient formulae. This suggestion places a lower limit for the development of the article in the tenth, ninth or eighth centuries, whenever one cares to date Homer. Accepting the mainstream of ancient scholarship, I put this before 800 BCE.³³ An upper limit is indicated by the fact that the article is barely attested in Cypriot and Pamphylian Greek, spoken in regions settled around 1200 BCE and more or less isolated from other Greeks after about a century.³⁴ Thus, either these traces filtered through in later times or the change was forming in the thirteenth century BCE. If one accepts the hypothesis of Phoenician influence proposed here, nonlinguistic evidence would suggest the tenth and ninth centuries, the period of Phoenician dominance in the East Mediterranean during which the *polis* and “slave society” seem to have been introduced from the Levant to the Aegean.³⁵ It would seem safer, however, not to narrow the four hundred year span from *circa* 1250–850 BCE.

The relatively late emergence of the Greek definite article cannot be attributed to substrate or genetic influence. Indeed there is no trace of it in the neighboring Indo-European languages, Italic and Armenian. Thus either its development was independent or the result of Phoenician, hence ultimately Egyptian, influence. Although the Greek definite article, like the Canaanite forms, was created from native demonstratives, the Greek nominative forms *ho* and *hē* are remarkably coincident with the Canaanite *ha*. This coincidence would seem to be the result of three factors: the existence of a demonstrative stem *s-* in Nostratic, the areal shift *s>h* which affected both languages and direct influence from Canaanite to Greek.³⁶

SUMMARY ON SYNTACTICAL CHANGES

The features discussed here appear to have come from different quarters at different periods. Although *gé*, *gár* and *oún* appear to be well integrated into the language of Hesiod and Homer, so far as we can tell, they were not into Mycenaean. Since they have no Indo-European etymologies, they appear to be copies made in the Late Bronze Age from Egyptian. Archaeological and documentary evidence makes such intimate linguistic contact very probable during this period. Although it is not attested

in Linear B, *autós* too was deeply rooted in Homer and must have been introduced by the late Second Millennium. By contrast, the definite article was only beginning to appear by the time of epic poetry and would seem likely to have been introduced around the beginning of the First Millennium, when we know that there were close connections between Phoenicia and the Aegean.

CONCLUSION

In this chapter, I hope I have shown the usefulness of not limiting approaches to the development of Greek or, for that matter, any other language exclusively to genetic terms. Furthermore, the investigation of loans from outside, and from very different language families, should not be restricted to obvious exotics. Other languages can have much deeper and wider effects. True, looking at Greek in an East Mediterranean context does not tell us much about its phonological development. Nevertheless, the failure of Indo-Europeanists—with the notable exception of Oswald Szemerényi—to make the investigation indicates the strength of the bondage of their intellectual tradition. When it comes to morphology and syntax, they have missed the important insights provided by such scholars as Saul Levin. In following chapters we will turn to lexicon, an aspect of Greek that is incomprehensible without a constant awareness of surrounding languages in general and West Semitic and Ancient Egyptian in particular.

CHAPTER 7

THE GREEK LANGUAGE IN THE MEDITERRANEAN CONTEXT

Part 3, Lexicon

Note the case of Greek, which is thoroughly Indo-European in morphology and phonology, but largely non-Indo-European in lexicon, of English, which is largely non-Germanic in lexicon and of Turkish and Persian with their extraordinary proportions of Arabic loan words.

I. J. Gelb, "Thoughts about Ibla"

INTRODUCTION

This chapter is divided into three sections, each concerned with the possibility or probability of lexical borrowings from Afroasiatic languages into Greek. The first part examines the present state of the study of this subject. Second is a consideration of whether Greeks in the Archaic and Classical periods had any conception of having borrowed from other languages and the third studies the reliability of postulating Indo-European roots when the only attestations are from Greek and Armenian or Greek and Latin. Such similarities may, in fact, merely be the results of common borrowings from Semitic or Egyptian. Much of this last section is devoted to Semitic and Egyptian loans into Latin and illustrates the need to look beyond Indo-European especially when considering genetically irregular parallels among Greek, Armenian and Latin.

THE STUDY OF LEXICAL BORROWINGS

Phonological and morphological exchange between languages is rare and is generally believed to require long periods of intimate contact between speakers of the giving and receiving languages. The copying or "borrowing" of words is far more common and easily accomplished.

Loanng is one of the main vehicles by which phonological and morphological change can be brought about.¹ Nevertheless, massive borrowing can take place without such changes. As we have seen in Chapter 5, no new sounds were introduced into Greek from Afroasiatic, although some previously existing ones, notably prothetic vowels, /b/, /p/, initial and medial s- and -ss-/-tt- became far more frequent as a result of contact with Ancient Egyptian and West Semitic.² By analogy, it should be noted that no new phonemes came into English after the Norman Conquest even though most of the vocabulary was introduced from outside after 1066.³

Etymologists have great difficulty explaining the Greek lexicon. As mentioned in Chapter 5, Anna Morpurgo-Davies, professor of Indo-European at Oxford, put the proportion of Greek words *with* Indo-European etymologies at less than 40 percent.⁴

Thus, despite assiduous work by brilliant scholars, the situation around 2000 CE is still very much as Sir Henry Stuart Jones described it in 1925. In explaining why the new edition of Liddell and Scott's standard and massive *Greek-English Lexicon* should, surprisingly, only include a "minimum" of "etymological information," he wrote,

A glance at Boisacq's *Dictionnaire étymologique de la langue grecque* will show that the speculations of etymologists are rarely free from conjecture and the progress of comparative etymology since the days of George Curtius . . . has brought about the clearance of much rubbish but little solid construction.⁵

Much of this "rubbish" was of course Semitic, which could not be accepted within the Extreme Aryan Model. This model, as I have already argued, was established earlier in philology than in other disciplines. The process of "clearance" in Greek was very much that described for English by W. W. Skeat, the famous linguist and lexicographer when he wrote in 1891:

I have had much to unlearn, during the endeavour to teach myself, owing to the extreme folly and badness of much of the English etymological literature current in my earlier days, that the avoidance of errors has been impossible . . . the playful days of Webster's *Dictionary* when the derivation of native English words from Ethiopic and Coptic was a common thing.⁶

Skeat described his own purpose in the following way: "I have endeavoured,

where possible, to trace back words to their Aryan roots, by availing myself of the latest works upon comparative philology.”⁷

To return to the lack of progress: clearly linguists relying almost exclusively on Indo-European have reached a dead end. All they can do is to try to explain why the Greek lexicon cannot be explained. The non-Indo-European elements are simply written off as “pre-Hellenic” or from other lost languages.⁸ It is commonly asserted that these non-Indo-European elements are the herbs, shrubs and natural features of the new environment settled by the incoming northerners. It is certainly true that words like *μάραθρον* “fennel,” *μίνθη* “mint” and *νήσος* “island” cannot be provided with plausible Indo-European etymologies.⁹

Emphasizing this type of example distorts the overall picture. As mentioned in Chapter 5, Morpurgo-Davies’s estimated Indo-European component of less than 40 percent of the total Greek vocabulary contrasts starkly with the 79 percent from Proto-Indo-European (PIE) roots found in the shorter Swadesh 100-word list of basic items.¹⁰

Thus in Greek the semantic areas for which an Indo-European vocabulary can be found are what might truly be called “basic”: nature, animals, parts of the body, family relations, personal and other pronouns, common verbs and adjectives. The vocabulary of higher culture—religion, abstraction, civic society, metal work and luxuries of all kinds—is non-Indo-European.¹¹ The absence of high-culture terms is made more striking by the fact that some of this vocabulary existed in PIE. For instance, the Teutonic root *gulth “gold” is related to the Old Church Slavonic *zlatō* and possibly to the Greek *khōr-* “green.” The Greek word for “gold,” however, is *χρῦσός*—*kuruso* in Linear B—which is admitted to be from the Semitic: the Akkadian *ḫurāṣu* the Canaanite *hāruṣ* “gold.”¹² Equally, the Sanskrit *raj*, the Latin *rex* and the Irish *ri* all mean “king” and come from a common Indo-European stem.¹³ In Greek the words are *ῥᾱναξ*, *wanaka* in Linear B and *βασιλεύς*, *qasireu*, both supposedly of pre-Hellenic origin. (For their Egyptian origins see below.¹⁴)

In their semantic range, the non-Indo-European elements in Greek resemble the French and Latin words in English, the Arabic in Swahili and the Chinese in Korean, Japanese and Vietnamese. These parallels would tend to go against the explanatory principle of a conquest of non-Indo-European speakers by Proto-Greeks. On the other hand, in a smaller group of languages conquerors of “low” cultural level have conquered higher civilizations. In most of such cases the conquerors are culturally and linguistically absorbed. In at least two, however, Hungarian and

Turkish, the conquerors have kept their basic linguistic structure and basic vocabulary, while taking on the lexicon of higher culture from conquered or neighboring peoples. But both Hungarian and Turkish retained their military vocabulary or that of their previous overlords, the Khazars and the Mongols, respectively. This is not the case in Greek. Apart from some chariotering terms that have Indo-Iranian origins, most of the language of warfare—words for “sword,” “bow,” “arrow,” “shield,” “armor,” “camp,” “army,” battle” etc.—appear to be non-Indo-European. Thus, if Greek belongs to the Hungarian-Turkish minority of languages, as the Aryan Model requires, it is very different from these two in its military terminology and is almost certainly unique.

If, on the other hand, the Revised Ancient Model is applied, Greek fits neatly into the larger group including English, Swahili, Vietnamese, Japanese, Old Javanese and many others.¹⁵ While the Aryan Model has not been tested lexically, because it is untestable, it is possible to falsify the Revised Ancient Model. We know a considerable amount about the languages spoken by Near Eastern neighbors of the Greeks and can test the model by studying these languages. The rest of the chapter will be devoted to this testing.

*The state of Semitic etymologies for
Greek words*

Despite the dominance of the Extreme Aryan Model, nearly all scholars have admitted that some Phoenician loan words exist in Greek. Attempts to find these words, however, have suffered from three serious handicaps: First, for religious reasons, scholars have been reluctant to admit the obvious linguistic fact that Hebrew is a Canaanite dialect.

Second, modern observers have reacted strongly against the Medieval and Renaissance belief that Hebrew was the language of the Tower of Babel and the ancestor of all other tongues. This reaction has maintained momentum throughout the nineteenth and early twentieth centuries with the rise and triumph of Indo-European philology and the Aryan Model. The passion still evoked can be seen in Ventris and Chadwick's tone in a 1955 statement referring to “a long period of unprofitable speculation on the mutual relationship of languages in which Hebrew played a pernicious role.”¹⁶

Third, while tolerant, if not lax, in accepting a Phoenician origin for Greek words for trade goods, classical scholars have rigorously rejected

any etymology that might challenge the Aryan Model. Thus, it has been relatively easy for scholars to admit such words as *kumino* in Linear B or **κύμῑνον** “cumin” or *kito* **χιτών** “dress” or **ἄρραβών** (4) “deposit” as Phoenician. In general, however, many refuse to connect the Ugaritic *bmt*, Hebrew *bāmāh* “high place” or “altar” to the Greek **βομός** (H) with the same meaning, or the Semitic $\sqrt{\text{qds}}$ “holy” as the source of **κῶδος** (H) “divine power.”¹⁷ The zenith—or nadir—of the Extreme Aryan Model in lexicography began at the same time as the peak of anti-Semitism in the 1930s but in this case continued until the 1960s. It was in the 1930s that the Indo-Europeanist Antoine Meillet wrote, “It was not the Phoenician civilisation that served as a model for the Greeks coming from the north: archaeology has proved it and one is not surprised to find only a tiny [*infime*] number of words borrowed from Phoenician.” He later wrote that “they certainly did not amount to ten.”¹⁸ This was the end of a long chain of “refinement” or limitation.

MICHEL MASSON’S SURVEY OF SCHOLARLY WORK ON THE TOPIC. In 1986, Michel Masson, a scholar of a later generation, published an important article “A propos des critères permettant d’établir l’origine Sémitiques de certains mots Grecs” [On the criteria permitting the establishment of Semitic origins for certain Greek words].¹⁹ This work included a persuasive history of the study of Semitic loans into Greek. He started with Heinrich Lewy’s *Die semitischen Fremdwörter im Griechischen* [Semitic loanwords in Greek] first published in 1895. Masson neglects English language sources and fails to mention Muss-Arnolt’s earlier scholarly work. But Masson rightly focuses on self-conscious tradition or succession from Lewy to Maria-Luisa Mayer’s *Gli impresti semitici in Greco*, which appeared as a book in 1960. He also includes Meillet’s pupil Emilia Masson who, in 1967, published her *Recherches sur les plus anciens emprunts sémitiques en grec* [Researches on the most ancient Semitic borrowings in Greek]. Emilia Masson was even more rigid than her predecessors in her insistence that only terms that did not offend the Aryan Model should be acknowledged. Thus the list was very largely restricted to luxuries: gold, clothes and above all spices.²⁰ This extreme view became the basis for the acceptance of Semitic loans in Hjalmar Frisk’s *Griechisches etymologisches Wörterbuch* and Chantraine’s *Dictionnaire étymologique de la langue grecque*.

Michel Masson describes the scholarly succession of Semitic loans as a series of filtrations. Lewy had proposed approximately 200 names and

400 words. Mayer reduced this to about a third of Lewy's list. Emilia Masson filtered still further. None of them established rigorous criteria for their reductions.²¹

In attempting to re-establish Lewy's scientific status, Michel Masson pointed out that the earlier scholar limited himself to concrete objects and grouped his proposals semantically. These limits set Lewy apart from the "confusionism" or shotgun approach of the earlier "pansemitists." According to Masson, Lewy had three implicit criteria. These were:

1. He refused hypotheses of Semitic origin when a Indo-European origin was possible.
2. He tried to set out a coherent series of phonetic correspondences, although he did not rigorously stick to them.
3. He threw out of his list abstract or too broad-ranging nouns, adjectives and verbs.²²

The first two criteria are unexceptionable, but Michel Masson approves of all three. While he believes that in some cases one can go beyond Lewy's list he does not believe that one should abandon the third basic principle. Like Lewy, and naturally like the more restrictive scholars, he cannot break free from the Aryan Model and envisage fundamental contacts between West Semitic and Greek speakers. Thus, he is clearly quite right to claim at the end of his article, "In setting out these exigencies, we do not want to correct scholars like Chantraine, Frisk and E. Masson. It is their criteria that we have attempted to define and apply. We have only tried to further their research."²³

Interestingly, Michel Masson neglected the English language publications that had appeared in the 1960s, 1970s and 1980s. These decades saw the beginning of the work of Michael Astour, John Pairman Brown, Saul Levin, and Oswald Szemerényi who, following the retreat of the Extreme Aryan Model and the discovery of Semitic loan words in the Linear B corpus, began to increase the number of recognized Semitic loans.²⁴ They happily used Ugaritic, Hebrew and even Akkadian parallels. With the exception of Astour, however, they largely continued to work within the Aryan Model to the extent that they too have largely restricted their search for Semitic etymologies to nouns, mostly those obtainable by trade, or obviously exotic Greek words. Nevertheless, over the last forty years, these scholars have transformed the whole atmosphere of Greek lexicography.

OTHER SEMITIC ETYMOLOGIES. While not inhibited by Lewy's third criterion, in this book I am bound by a constraint that has not affected other scholars. I accept the hypothesis that the Philistines were chiefly Greek speaking.²⁵ Thus, cognate terms in Greek and Hebrew may be the result of a Greek loan into later Canaanite rather than the other way around. Interestingly, however, an Egyptian origin is possible for the two best-known examples of strikingly similar words in Canaanite and Greek. For instance, the word *mākerāh* "a type of weapon" which is found as a *hapax legamenon*, a single instance in Genesis, could be a loan from the Greek **μάχαιρα** (H) "dagger," as *mākerāh* has no direct Semitic cognates.²⁶ On the other hand, a root $\sqrt{mḥ}$ "match, fight" is well established in Afroasiatic and the Egyptian word with this sense *mḥ3* has a final -3 that would explain the /r/ in Hebrew and Greek.²⁷ In Egyptian of the Ptolemaic period, there is even a form *mḥay* "pierce with a spear." Thus the least unlikely explanations of the undoubted relationship between *mākhaira* and *mākerāh* are either that it was borrowed into Greek from Egyptian and then taken from Greek into Canaanite or that Greek and Canaanite borrowed it separately from Egyptian. A parallel for this can be seen in the pair made up of the Greek **λέσχη** (H) and the Hebrew *liškāh* "chamber for drinking and relaxing." As both words are isolates in their own language families, scholars have differed as to which language borrowed from the other.²⁸ I believe that both came directly or indirectly from an unattested but perfectly possible Egyptian form *r-isk "place for lingering."²⁹

A place of nether darkness. Another problem with discussing possible Semitic or Egyptian etymologies for Greek terms is when plausible sources for a word can be found in both Indo-European and Afroasiatic. The classic example of this situation is **ἔρεβος** (H) "place of nether darkness, dusk." Debates over the relative merits of the Semitic and Indo-European etymologies of *erebos* have carried on for well over a century.³⁰ I follow the first tradition and my critics Jasanoff and Nussbaum follow the other. Jasanoff and Nussbaum derive *erebos*, from an Indo-European root *h₁reg^wos [or, as most modern scholars would put it *h₁rek^wos] "darkness." They establish this hypothetical root on the basis of forms found in Sanskrit, Germanic and Armenian. The Armenian is most important because they see its form *erek* "evening" as providing evidence of a laryngeal consonant lost in other Indo-European languages and, therefore, explaining the prothetic e- in *erebos*. Other scholars do

not explain the parallel in the same way. James Clackson, in his recent *The Linguistic Relationship between Armenian and Greek*, denies that the two prothetic vowels are directly related, either as a preservation of a laryngeal or as a common innovation. He sees them simply as coming from an Anatolian [and Aegean?] tendency to avoid initial r-. Presumably because many Greek words of undoubted Indo-European origin begin with r-, Jasanoff and Nussbaum prefer to postulate a laryngeal.³¹

The question of the origin of *erebos* is further complicated by the existence of another Indo-European root *ereb *orebh “dark, swarthy, stormy” found in Slavic and Old English. Julius Pokorny does not include *erebos* in this cluster.³² However, Allan Bomhard links *erebh to the Semitic √rb “to set as the sun, become dark.”³³ He sees both as coming from a single Nostratic root.

No doubt √rb is deeply rooted in Semitic. Furthermore, the words *araba* “black” and *orbā* “cow with black spots” found in the Central Cushitic languages of Bilen and Saho make it possible that it is common to Afroasiatic as a whole. This makes the suggestion that it is an Indo-European loan into Semitic less likely.³⁴

Jasanoff and Nussbaum object to my using the Akkadian form *erebu* “setting of the sun.” In contrast, they construct a Canaanite form *aribu. I suppose that they derive this form from the Arabic vocalic pattern found in *ġariba* “be black.” Many other vocalizations of the triconsonantal root, such as *ġaraba* “to set [of the sun]” *ġarb* “west,” can also be found. In fact, the standard reconstruction of the Canaanite vocalization that preceded the Hebrew *ereb*, “evening” is *arb.

The initial e- in *erebos* could be derived from the Semitic in two ways. First, John Pairman Brown suggests that it comes from the segholate West Semitic form *ereb* itself.³⁵ Segholation, which in this case involved a development *arb > *ereb*, is generally thought to be late in Hebrew, but the evidence from other Canaanite dialects is not clear. In any event, as Jasanoff and Nussbaum point out, I prefer Astour’s derivation from the Akkadian *erebu*.³⁶ The appearance of Akkadian forms in Greek can be explained in three ways. First, Akkadian texts may have preserved words in use in Syro-Palestine that have not survived to be attested there. Second, the discovery of the ancient Syrian language Eblaite indicates hard and fast distinctions should not be made between East Semitic and West Semitic. Third, Akkadian was the diplomatic language in Syro-Palestine during the relevant Second Millennium BCE, and an important literary language there as well.

In short, as I stated in Volume 2, two plausible etymologies exist for *erebos*. I prefer the Semitic one for the semantic reason. There is little doubt that an Indo-European root *regwos (*rekʷos) existed. Clackson's and Lejeune's arguments that the initial e- simply avoids an initial r- lessen the certainty of Jasanoff and Nussbaum's proposal that it is a reflex of the ancient laryngeal *H₁. Nevertheless, the Greek prothetic vowel in *erebos* is explicable in terms of both Indo-European and Semitic.

The semantic reason for preferring a Semitic etymology is the clear association of Ērebos with the West's dark underworld of the dead. This semantic field has very few words of Indo-European origin but a considerable number with plausible derivations from Semitic.³⁷

Nevertheless, while I believe that it is possible for any Greek word without an Indo-European etymology to have a Semitic one, cognicity has to be checked very carefully not merely for phonetics and semantics but also against other possibilities. For example, two forms can rise independently or they can result from Greek loans in Canaanite. Despite these provisos my scope is clearly wider even than those of Pairman Brown, Levin and Szemerényi who have done so much to rescue Semitic etymologies from the troughs into which they had been pushed by the works of Antoine Meillet and Emilia Masson.

*The state of Egyptian etymologies for
Greek words*

Egyptian etymologies of Greek words are even more restricted than those discussed above. As mentioned in Volume 1, acceptance of the reliability of Egyptian texts only came in the 1850s after the establishment of the Aryan Model. Thus, despite Barthelémy's eighteenth-century work on Greek and Coptic and a few notes by Birch and Brugsch in the 1850s before Egyptology was overcome by the prevailing Aryanism, no tradition existed of Egyptian etymologies for Greek words, comparable to the one from Semitic created by Bochart, Movers, Lewy and Muss-Arnolt.³⁸ Indeed in the 1880s, as mentioned above, the discipline's *doyen* Adolf Erman specifically warned Egyptologists off looking for Egyptian origins for Greek forms.³⁹ During the twentieth century, scholars like Spiegelberg, Erichsen, Černý and Gunn have accepted some of the earlier hypotheses and have even added one or two etymologies.⁴⁰ Furthermore, classical scholars have been perfectly willing to accept Egyptian names for such obvious Egyptiana as "ebony," "ibis," "Nile perch" and

the Sphinx. Nevertheless, in 1969 when the scholars Bertrand Hemmerdinger and A. G. McGready summarized the position, their totals of acceptable Egyptian loans came to less than forty words, almost all of which were exotic animals or material objects.⁴¹

The ideological nature of their criteria for admission can be seen from a quotation from McGready's article:

Egyptian culture stands to Hellenic as Chinese to European. It is in many ways so alien that Greeks could find little to borrow (in the philological sense), or that they wanted to borrow. Religious and philosophical concepts as developed by the Ancient Egyptians were for the most part too exotic to correspond with anything readily intelligible to a Greek. Under such circumstances it should come as no surprise to find that Greek borrowing [*sic*] are almost always concrete, referring to things peculiar to Egypt.⁴²

This desire of a scholar, treading on dangerous ground, to assert his orthodoxy is seen again in an article "Egyptian Elements in Greek Mythology" in which the writer ends by saying, "The myths, however, are Greek in spirit despite these borrowings and influences. And let us note that whatever the Greeks acquire from foreigners is finally turned by them into something finer."⁴³ Even in the 1970s and 1980s there has been no clear movement on the study of Egyptian etymologies in western Europe. Quite the contrary, in a monument of academic niggling and misplaced precision, Richard Halton Pierce felt able to dismiss most of Hemmerdinger's and McGready's etymologies.⁴⁴ In 1989 the French scholar Jean-Luc Fournet reduced the number to seventeen.⁴⁵

In eastern Europe there was more openness. Between 1962 and 1971 Dr. Constantin Daniel of Bucharest published some constructive articles that proposed Egyptian origins for such centrally significant words as βασιλεύς, ἥρωες and τιτάξ.⁴⁶ Daniel was building on the important work of the Soviet Coptologist P. V. Jernstedt who wrote during the improbably open-minded era of linguistics that had flourished in the pit of Stalinism in the early 1950s.⁴⁷

Since the 1990s consideration of Egyptian etymologies has opened up in the West, and such younger classicists as Garth Alford, Erwin Cook and R. Drew Griffiths have begun to study striking similarities between Egyptian and Homeric imagery *and vocabulary*.⁴⁸

When looking for foreign loans one should not give up simply because a word appears to be deeply rooted in the native language. Even

leaving out words beginning with prepositions, χρῦσός “gold” (which is universally admitted to be a borrowing) has 68 entries for derivatives in Liddell and Scott’s dictionary. βύσσος (H) from the Canaanite *buš* (The Phoenician *ḥš* and Hebrew *buš* or *būš*) “linen and other cloths, stuff” has formed verbs βύω(ς), ἐμβύω(ς) and ἐπιβύω(ς) “to stuff” in which the final consonant of the root has been dropped as if it were a morphological feature.⁴⁹ To take an example from a loan in the other direction, Mishnaic Hebrew contains the following words: *zāwag* “to marry, to join”; *zeweg* “marriage”; *zūgāh* “intended, borrowed” and *zūg* “pair, yoke.” The last gives the game away. They are all derived from the Greek ζεύγος “yoke” with its clearly Indo-European etymology. The presence of many varied forms should give grounds for pause but cannot be used to rule out the possibility of a loan. The only reason for completely ruling out a loan would be the existence of an equally plausible or better cognate in a genetically related language that was not itself in contact with a possible outside source.

ANCIENT GREEKS’ SENSE OF LEXICAL BORROWING

In his play *The Phoenician Women* Euripides strongly implied that the heroic invaders spoke Phoenician:

You too Epaphos, son of Zeus,
Born long ago to Io our ancestress,
I invoke the song of the East,
With prayers in the Phoenician tongue,
Come, come to this city:
For you Thebes was founded by your descendants.⁵⁰

Although many of the founding heroes were supposed to have come from Egypt, there is to my knowledge no suggestion of their having spoken Egyptian. On the other hand, Homer refers several times to “the language of the Gods.” The references usually take the form: “it is called x by the Gods and by men y.”⁵¹ Could this divine speech have been Egyptian? The concept of a “language of the gods” existed in the Egyptian term *m(w)dw ntr*. P. V. Jernstedt’s proposal that *m(w)dw* (the Coptic is *moute* “speech, language”) is the source for μύθος “myth” is very plausible.⁵² It is interesting that *m(w)dw* is written with a staff, 𓄢 (S43). Carleton Hodge made a powerful case that holding a staff gave the right to speak

in the assembly, not only in Ancient Egypt but also in Homeric Greece and places in both east and west Africa. He raises but rejects the possibility that the god Thoth's staff represented *m(w)dw ntr*.⁵³ *Mythos* has no Indo-European etymology.

The idea that Egyptian was the Greek language of the Gods is less preposterous than scholars working within the Aryan Model might suppose. In his "Reply of Abammon to Porphyry's letter to Anebo" the philosopher Iamblikhos of the fourth century CE wrote:

Why do we prefer barbaric signs to those in our respective languages? For this there is a mystic reason. As the gods have taught us that all the language of the sacred peoples such as the Assyrians and Egyptians is suitable for sacred rites. We believe that we should address the gods in the language which is natural to them in formulas that we can choose but as the language is primary and more ancient—so much more for those who first learnt the names of the gods and have transmitted them to us mixing with their own language, that we might always preserve immovable the law of tradition. For if anything suits the gods it is surely the perpetual and immutable that is natural to them. . . . As the Egyptians were the first to communicate with the gods, the latter love to be invoked according to the rites of this people.⁵⁴

There is no doubt that for most Greeks of the fifth century BCE, Egypt was in some way divine and had a special relationship with the gods. Herodotos' views on the subject were discussed in Volume 1.⁵⁵ There is also other evidence. For Aiskhylos, Egypt was the "Sacred land of Zeus and the water of the Nile impossible to pollute."⁵⁶

Earlier still and more relevant to the nature of the language of the Gods, however, was Homer's attitude to Egypt. Akhilles was undoubtedly speaking for his author when he claimed that Thebes in Egypt was the richest and most impressive city in the world.⁵⁷ What is more, it also had divine and magical superiority. It was there that Helen in her capacity as Artemis of the golden arrows had her divinity renewed through a sacred or magical drug. The poet concludes the passage describing this by stating: "for there [Egypt] the earth, the giver of grain bears greatest store of drugs [φάρμακα], many that are healing when mixed and many that are baneful; there every man is a physician, wise above human kind; for they are of the race of Παῖήων [Apollo]."⁵⁸ Given these connotations it seems reasonable to consider the possibility that by "language of the

gods” Homer meant Egyptian. The hypothesis is testable, and set out below is a glossary of divine and human words and names:

Βριάρεος	Αἰγαίων ⁵⁹
Μώλυ ⁶⁰	
Μυρίνης	Βατίεια ⁶¹
Ξάνθος	Σκάμανδρος ⁶²
Χαλκίς	Κύμινδης ⁶³

The Egyptian etymology of Briareos, with a hundred hands and fifty heads, is discussed in Chapter 19.⁶⁴ Aigaiōn is more difficult to identify, within Greek mythology he would appear to be connected to Aigeus and, hence, Poseidon, but the name may be derived from the ancient giant Ὀγ. Ὀg was the last of the subterranean giants, the Rephaim, and his name seems to come from Semitic root Ṣwg “draw a circle, surround, the whole world.”⁶⁵ The phonetic parallel is weak but it is possible in view of the striking semantic similarity. If Aigaiōn corresponded to Ὀg, Semitic words and names could be classified as human not divine.

A case can also be made on the other side. *Mōly*, the divine name of the magic plant with a black root given to Odysseus by Hermes to protect him from Circe, has been connected by Indo-Europeanists to *mulah* the Sanskrit word for “root.” On the other hand, Victor Bérard, who maintained that the “language of the gods” was West Semitic, linked *Mōly* to *mallūah* “mallow” or to *melah* “salt.”⁶⁶ Astour prefers to associate it with the related verbal root ṣmlh “good” found in Ugaritic and Arabic.⁶⁷ I find Bérard’s first suggestion the most likely of these.

In Book Two of the *Iliad* Homer wrote, “Now there is before the city a steep mound afar out in the plain, with a clear space about it on this side and that; this do men verily call Βατίεια but the immortals call it the barrow of Μυρίνη ‘light of step.’”⁶⁸ The human word for this pyramid-like object may be linked to the Greek stem *bat* “step.” The divine name is inexplicable but its first element does resemble the Egyptian onomastic Mri “loved(of).” It could, for instance, be derived from Mri imn “Beloved of Amon,” a common epithet for pharaohs. Both etymologies, however, remain extremely dubious.

The cases for an Egyptian Xanthos and a Semitic Skamandros are discussed in Chapter 10.⁶⁹ Astour believes that Khalkis, a bird probably a nighthawk, is derived from the West Semitic *halaq* “smooth, hairless” thus suggesting a vulture.⁷⁰ One might as well derive it from the Egyptian

ḥṣḥ “speedy, swift” or “spear fish.” Both are possible but they cannot be accepted, in the absence of any other support.

If these words form a coherent whole, which would seem plausible since people are unlikely to risk the impiety of casually inventing divine names, the case for their being Egyptian would seem slightly stronger than that for Canaanite or Greek. Apart from the concept of a language of the gods itself, there are the likely Egyptian origins for Briareos and Xanthos and the plausible Semitic etymology of *mōly*. Nevertheless, the picture is far from clear-cut.

LOANS FROM AFROASIATIC INTO GREEK AND INTO ALBANIAN OR ARMENIAN

In the case of Greek, an Indo-European root cannot be assumed when a related word only appears in Greek and one other of three languages: Albanian, Armenian and Latin. Albanian is the sole survivor of an independent branch of Indo-European. It is first attested from the sixteenth century CE. By which time it had absorbed most of its vocabulary from neighboring Indo-European languages—Slavic, Italian, Eastern Romance and Greek. While scholars accept considerable borrowing from Modern Greek over the last 500 years, they are surprised, given the geographic juxtaposition, at the paucity of loans from Ancient Greek. Such loans, however, may well have been masked by an absorption into Albanian phonology. In this case it would be extremely difficult to distinguish genetic cognates from loans.

Armenian participation in areal shifts also affected Greek and Semitic, as has been discussed above. Furthermore, by the time it was first attested around 400 CE the language was already full of loan words. These were mostly from Persian but there were also hundreds from Greek and from Semitic, especially Hebrew and Aramaic.⁷¹ Thus, where the only attestation of a root is in Greek and Armenian and there is a plausible common Semitic or Egyptian etymology, one must check carefully to see whether the correspondence is the result of normal Indo-European soundshifts. The Afroasiatic etymology should be preferred if this is not the case. In some instances, however, there are no such tests and one has to weigh the two more evenly. For example, the equation between the Armenian *sowt* “false” and the Greek **ψεύδος** (H) would seem shaky within Indo-European.⁷² It would seem much more plausible either to see the Armenian form as a borrowing from Greek or to derive both

from the Semitic root $\sqrt{\text{zwd}}$ “to act presumptuously” which is attested in both Hebrew and Aramaic.⁷³ Another example is the words **ὄνειρος** (H) in Greek and *anurj* in Armenian, both meaning “dream.” (The implausibility of a genetic relationship between them will be discussed in Chapter 9.) Thus, the existence of Greek and Armenian cognates unattested elsewhere in ancient Indo-European languages cannot be relied upon to rule out the possibility of a loan from Egyptian or Semitic or other non-Indo-European languages.

Afroasiatic loans in Armenian and Latin

Latin is attested several centuries earlier than Armenian and did not go through any of the East Mediterranean linguistic shifts of the Second Millennium, but the same principles hold true. Sometimes a double loaning from Afroasiatic into Greek and Latin is indicated by the correlation of sound shifts in the Afroasiatic language or Indo-European. I shall start here with a noncontroversial instance, the place name Tyre. As mentioned in Chapter 5, the name $\sqrt{\text{T}}^{(y)}\text{ôr}$ was borrowed into Greek as **Τύρος**. Around the middle of the Second Millennium BCE $\sqrt{\text{t}}$ /merged with $\sqrt{\text{s}}$ / making the Phoenician and Hebrew names šôr . Hence, the Old Latin name for the city was Sor. This name was later supplanted by the Greek Tyre.⁷⁴

Another example of this distinction between Greek and Latin borrowings arising from sound shifts in Semitic is the pair **μαλάχη** (H) and *malua* both meaning “mallow.” The lexicographers of Greek and Latin agree that the two are loans from a non-Indo-European “Mediterranean” language. They did not consider the possibility of a Semitic origin. Maria Louisa Mayer, however, saw the obvious connection with term attested in Job (30.4) *mallûah* “mallow.”⁷⁵ As the plant flourishes on salty ground, it certainly derives from the Semitic root $\sqrt{\text{mlh}}$ “salt.” In Punic $\sqrt{\text{h}}$ / became $\sqrt{\text{h}}$ /, $\sqrt{\text{ʔ}}$ / or zero. Thus the Greek *maláklē* was borrowed before the weakening and the Latin *malua* after.⁷⁶

Other similar words that appear in Greek and Latin cannot be so easily related. The possibility that they could be the results of loans from other languages should always be kept open. Furthermore, in the first instance one should look at Ancient Egyptian and West Semitic both because they are relatively well attested and because these two peoples were frequently cited by ancient Greek and Roman writers as having had a major influence on their civilizations.

Semitic traces in Rome and in Latin

Latin's massive borrowings from Greek are well known and understood. I maintain that between 800 and 400 BCE Latin borrowed almost equally heavily from Semitic, either directly from the Punic spoken in West Phoenicia or indirectly through Etruscan and Greek. This type of contact is unacknowledged—for the same reasons as those discussed in this book regarding Greece.⁷⁷ Borrowing on such a scale would indicate prolonged and intense contact between Canaanite and Latin and Etruscan speakers. Such a conclusion does not in any way conflict with other sources of evidence. Between 1930 and 1960 Rhys Carpenter and other champions of the Extreme Aryan Model claimed, on the basis of “the argument from silence,” that Phoenicians had not reached the West Mediterranean until the seventh century BCE and even then contacts had been very few and of no cultural significance.⁷⁸ Even at the time, however, there was some resistance and such scholars as William Albright, Pierre Cintas and G. Charles-Picard continued to maintain the traditional dates for these settlements in the early eighth and ninth centuries and even earlier.⁷⁹ Since the 1960s, with the turning away from the Extreme Aryan Model, there has been a tendency to return to the traditional chronology. Thus, it is now generally accepted that Phoenicians were present in North Africa, Spain, Sardinia and Sicily well before the traditional foundation of Rome in the middle of the eighth century.⁸⁰

From historical records we know that Phoenicians and Etruscans had close diplomatic and commercial dealings from the seventh to the second centuries BCE.⁸¹ The first of these contacts saw a massive wave of orientalizing in Etruria. Archaeology indicates still earlier relations. A century earlier, many Phoenician practices and objects had made it into Latin: the move from cremation to burial (the Phoenician custom), the use of Aegypto-Phoenician canopic jars and Phoenician “Aeolic” columns and the importation of Egyptian and Phoenician objects, and even more distant objects.⁸² Through Phoenicia, the Middle East had a massive influence on Etruscan, hence Roman, religion. For example, the Assyriologist Jean Nougayrol has shown how haruspicy, the examination of livers for omens, spread from Babylonia to Etruria through Phoenicia.⁸³

D. Van Berchem has argued convincingly for a Phoenician origin of the temple and cult of Hercules, the oldest in Rome.⁸⁴ Ivory chairs and Tyrian purple cloth undoubtedly had religious and political significance in Rome. Even in antiquity the striking institutional parallels between

the two elected suffetes (*soṭṭatīm* “judges”) in Carthage and the Roman consuls were acknowledged.⁸⁵ The elements *-sil* and *-sul* in *cōnsilium* and *cōnsul*, the ancient forms of which were *consol* and *cosol*, have been difficult to explain in terms of Indo-European. Ernout and Meillet dismiss a derivation from a hypothetical root **sel* found in the Greek ἐλεῖν “take” or from **con-sidium* “sitting together.” They continue, “*Reste l’hypothèse d’un emprunt, qui n’est pas impossible, mais qui reste indémontrable*” [There remains the hypothesis of a borrowing, which is not impossible, but remains undemonstrable]. In fact, a clear source exists for a loan: the Semitic root √*s^cl* probably from forms of the Canaanite *sā^cel* “to ask, enquire” with the present participle *so^cel*. The verb is well rooted in Semitic and the semantic match is nearly perfect.⁸⁶

The Assyriologist and legal historian Raymond Westbrook has noted strong Semitic influences on the earliest Roman law, the so-called Twelve Tables.⁸⁷ The failure, until recently, of modern historians of Rome to draw obvious conclusions from this type of evidence is not surprising when one knows they come from a tradition founded by Niebuhr and Mommsen.⁸⁸ Given all these indications of contact, it would be surprising if there had not been considerable borrowings from West Semitic into Latin. A few words have been considered as possible Punic or Numidian (Berber) loans: *mapālia* or *magalia* “hut” and *mappa* “napkin” and, interestingly, the greeting *aue*.⁸⁹ These, however, are not the only indications of the importance of Semitic languages in the creation of Latin. Thus, it would seem useful to give a few more examples.

For a city set on seven hills, the name *Rōma* and the Etruscan clan name *Ruma* are more plausibly derived from the common Canaanite place-name *Rāmāh* “citadel, high place” than from some version of the Indo-European~root **sreu* “flow.”⁹⁰ The Masoretic vowel sound that is represented here by /ā/ was not, as is commonly supposed, a long /ā/ but represented a vocalization between /a/ and /o/.

Although most cities of the region have Italic or Etruscan names, there are also Semitic ones. Cortona would seem to belong to the “Kiryat” group discussed in Chapter 20. Nepete appears to come from the Semitic root √*nbṭ* “gush forth” (of water) or oasis. People of the deserts or oases were sometimes called Nabati or Nabataeans in Arabia or Nobatai in the eastern Sahara whose city on the Upper Nile was known as Nabata or Napata.⁹¹

Combining the Canaanite suffix *-on* with √*nbṭ* provides the most plausible origin of the divine name *Neptune*. He was the god of ground

water as well as of the sea. Neptune was also the patron of chariots, which were widely used by the savage inhabitants of the oases of the Sahara in the First Millennium BCE.⁹² Nepete was a town south of Rome with a river and springs. As the antiquarian Dennis described it in the 1840s, “He [the traveler] has left the open wastes of the Campagna and entered a wooded district. It is one of the few portions of central Italy that will remind him, if an Englishman, of home. Those sweeps of bright green sward—the whole forms a lively initiation of—what is most rare on the continent—English park scenery.”⁹³

To return to Latium, the most plausible etymology for Tībur, the classical name of Tivoli, which is set on a striking mountain, must come from the Hebrew toponym for mountains, ṭābur (with the vocalization Tibur in Aramaic) “navel, central mountain,” Tībur is where the Anio River (now Aniene) bursts out of the mountains. It meets the present Tiber just north of Rome. The striking similarity of names suggests that the river flowing through the city gained its name from the mountain.⁹⁴ As mentioned above, ṭābur or tabor occurs with a prothetic a- or with the article ha-, as in Atabyrion, the highest mountain on Rhodes.⁹⁵

Another tributary of the Tiber was the Nār, now the Nera. It flowed between the territory of the Sabines and Umbria, and the Umbrian name was Nahar. Servius, the commentator on the Aeneid, derived the name from a Sabine word for sulfur—the river has sulfurous springs.⁹⁶ The Sabine or Sabellian language, however, had ceased to be spoken centuries before 400 CE when Servius flourished. This etymology was probably no more than a reasonable speculation. It is much more plausible to derive Nār/Nahar from the Canaanite *nāhār* “stream, river,” a word that is deeply embedded in Semitic.

The Tarpeian rock upon which prisoners were executed and their bodies exposed, appears to have been near the Roman Capitol. Its name is sometimes supposed to be Etruscan and related to the royal name Tarquin.⁹⁷ Labiovelars, however, have not been found to break down in Etruscan or Latin, though they did in Oscan.⁹⁸ Furthermore, the final -n or -m in *Saxum Tarpeium* appears to be merely morphological. A more probable derivation is from the Canaanite *ṭārap* “to tear, rend” or *ṭrēpā* “torn flesh” and *tereḫ* “prey” and “mountains of *tereḫ*” appears to mean the torn flesh of a lions lair.⁹⁹

Turning from place-names, we can find other interesting forms in Latin. Some important Latin words may have the same origins: *amō* “I love” and its many cognates, *amicus* etc., may come, as Pokorný sup-

poses, from a stem *amm “mother,” common to many Indo-European languages.¹⁰⁰ -Mm- is, in fact, a worldwide stem for mother and breast.¹⁰¹ The Afroasiatic root *ʿam, found in Central Chadic and Dahalo as well as Semitic, means “relative, uncle, friend.”¹⁰² Thus, the specific Latin term *amita* “father’s sister” almost certainly comes from the Canaanite ʿam “kinsman on the father’s side” and ʿamīt “associate, fellow, relation.” There are many parallels for this in Semitic and elsewhere in Afroasiatic. *Amō* would seem to come from both Afroasiatic and Indo-European sources.

The Latin *secūrus* has always been given the charming folk etymology of *se-* “away from,” and *-cūra* “care.” Indeed, *se-* can be used as a prefix of separation. *Secūrus*, however, can be much more plausibly derived from the Canaanite passive participle *sakūr “dam, shut up”; *sāgūr* with the same meaning is attested and there is the Akkadian *sikkurum* “door bolt.” The conventional Indo-Europeanist etymology for *cūria* “a village or division of the Roman people” is from a hypothetical *ko-wiriyā *co-vir* “with man.” It is much more plausible to derive it from the Canaanite *qryt* “city,” discussed below in Chapter 20.

The scholar Varro of the first century BCE derived the Latin *idus* “days and nights of the full moon” from Etruscan. There is no reason to doubt this but that leaves the question of the origin of the Etruscan word. The twentieth-century lexicographers Ernout and Meillet have dismissed the suggestion that it came from a hypothetical Etruscan word “to divide” and they are skeptical of any Indo-European etymology. It would seem more likely to come from a Semitic root, probably derived from the Sumerian *itu* “month” but occurring in the Arabic *ʿid* “feast, feast day.”

A final example of a Latin loan from Semitic is *summa*. This form is undoubtedly related to the Oscan *somo*, but cognicity with the Sanskrit *upama* “uppermost” is very doubtful.¹⁰³ It would seem much more plausible to derive it from the Afroasiatic and Semitic root *sam “high” attested in Semitic in the Ugaritic *smm*, the Phoenician *smm* and the Hebrew *šāmayim* “heavens.”¹⁰⁴ A more general sense of “high” is found in the Aramaic and Syriac *šāmayi* and the Arabic *samā* “was high, lofty.” This was almost certainly the origin of the “old word” reported by Strabo to be in the Greek place-name element *sam-* found in Samos, Samothrace and other high places.¹⁰⁵ Although the predominant vocalization of the root in Semitic languages is with an /a/, it does occur with /u/, as in the Arabic *sumū* “height.”

If all, or most, of these etymologies are accepted, their centrality would

indicate that they are the tip of an iceberg and that Latin (and Etruscan) was permeated with Semitic words. Thus, there would seem no reason to deny the possibility of a Semitic loan into Greek merely because the word is also attested in Latin.

Egyptian to Latin

As far as I am aware, no evidence exists of an Egyptian presence in Italy in the first half of the First Millennium BCE.¹⁰⁶ Thus, any Egyptian influences on early Rome would be indirect, through Etruscan, Punic or Greek. Not surprisingly, therefore, to my knowledge, only one Italian toponym possesses a possible Egyptian origin. Pisa would seem to come from P3 s3 or Pr s3 “the marsh or low shore, house of the marsh or low shore.” Pr in place-names is rendered Pi- in the Bible. Both the Italian Pisa and the one in Elis in the northwestern Peloponnese are situated on low swampy shores.

There are two similar Latin words *urbs* “city” and *orbis* “circle.”¹⁰⁷ John Pairman Brown has made a strong case for the religious significance of a circle, marked by a wall or a mere furrow, in the foundation of Rome and other cities.¹⁰⁸ The Middle Egyptian root *w3b* has various meanings “socket of a tooth or tree, swaddling clothes.” *W3bt* is “mound, high lying agricultural land, the body of the Red Crown, without the snake.” The common theme would seem to be “circle, encircling.”¹⁰⁹ The use of *w3bt* to mean “mound, high lying agricultural land” suggests that the sense of *urbs* may already have been present in Egyptian. Such a suggestion is strengthened by the appearance of *w3bw* as a place-name meaning “settlement.”¹¹⁰ Ernout and Meillet state that *urbs* is “sans doute emprunté” [without doubt borrowed]. They also deny the etymology of *orbis* from the Greek ἐρέφω “I cover” on both phonetic and semantic grounds. All they can do is to relate it to the Umbrian *urfeta*. The correspondence of the Egyptian /3/ to a liquid shows that the borrowing must have occurred in the Second Millennium. Therefore, and given the Umbrian cognate, it is likely that it was translated into other Italic languages or into Etruscan before reaching Latin.

Other fundamental Latin words derive ultimately from Egyptian. The Middle Egyptian 3*tp* meant “to load, carry.” Lexicographers have puzzled over the parallels and differences between the Greek λίτρα (4) and the Latin *libra* both meaning “weights.” As the Greek word is associated with Sicily, Chantraine proposed that both derived from a non-Indo-European

“Sicilian substrate.” Ernout and Meillet simply state that *libra* comes from a non-Indo-European substrate. The Egyptian etymology from ʒtp would explain the alternation t/b but here again the liquid /ʒ/ indicates that the loan must come from the Second Millennium.¹¹¹

The Late Egyptian *psn* meant “loaf.” Because of the diminutive form *pāstillus*, the Latin *panis* “bread” has been traced back to a hypothetical *pāšnis. Thus, the phonetic fit is as excellent as the semantic one.

Ernout and Meillet write of the Latin preposition *ob* “in front of, against”: “*il est impossible d’en donner une étymologie rigoureuse*” [it is impossible to give it a rigorous etymology]. Naturally by etymology they mean Indo-European etymology. The words *wbʒ* in Demotic Egyptian and *ube* in Coptic both mean “in the face of.” Although the Egyptian and Latin words are obviously connected, the direction of borrowing is not clear. Given the difficulties in explaining *ob* in the well-worked-out Indo-European language family, the probability is clearly that it went from Egyptian to Latin not vice versa.

The Egyptian *pr ntr*, *pi ntr* in Demotic is, “home of the god, shrine, temple.”¹¹² The much more frequent *ht ntr* will be discussed at length in Chapter 22. The Latin *penetralia* originally meant “inmost, most sacred parts of a building.” From this came *penetrare* “penetrate” and, possibly, *Penātes* “household gods,” although these may come from *pʒ ntr* “the god.” After denying some semantically far-fetched hypotheses, Ernout and Meillet write about this cluster, “despite its Indo-European aspect, this group of words is without an etymology.” *Pi ntr* provides a good alternative.¹¹³

The Latin *seŕō* is “to tie in a file.” Thus *dēseŕō*, past participle *desertum*, means to de-link or “desert.” In another sense, *desertum* was used in Church Latin to translate the Greek ἡ ἔρημος “wilderness, desert.” The Egyptian *dšrt*, used until the Ptolemaic period, also meant “desert.” *Dšrt* derives from the adjective *dšr* “red” and was used in contrast to Kmt “the black land, Nilotic Egypt.” Thus the Egyptian origin of *desertum* in this sense is clear.¹¹⁴

CONCLUSION

In this chapter I have tried to show that relatively little work has looked into the possibilities of Afroasiatic etymologies for Indo-European languages, especially those languages carrying a heavy cultural load such as Greek and Latin. The chapter fails to tackle the clearly important Semitic

influences on Armenian but does sketch out what appears to be the substantial component of Afroasiatic loans in the Latin vocabulary. Therefore, unless they correspond to regular phonetic developments in the languages, cognates between Greek and Armenian or between Greek and Latin that are not found in other Indo-European languages should be treated with great caution.

CHAPTER 8

PHONETIC DEVELOPMENTS IN EGYPTIAN, WEST SEMITIC AND GREEK OVER THE LAST THREE MILLENNIA BCE, AS REFLECTED IN LEXICAL BORROWINGS

INTRODUCTION

This chapter is concerned with lexical borrowings from Egyptian and West Semitic into Greek and in particular with their relation to the changes that took place in the two Afroasiatic languages during the more than three thousand years from 3000 BCE to 300 CE. To assess the phonetic plausibility of loans from the two Afroasiatic languages into Greek, we must first outline what is known about the shifting phonetics of the three languages.

In estimating the possibility or probability of a loan, I have tried to reduce subjectivity—though not, of course, eliminating it—by applying a method devised by the Egyptologist Werner Vycichl to assess loaning between Egyptian and Semitic. He gave a possible three points for phonetic correspondence, usually the triliteral root, and up to three points for semantic similarity, which is far harder to quantify.¹ To be accepted at all, a possible loan must accumulate at least four points; to be strong it should have five. To be virtually certain it must possess all six. To give some examples: **Δωδώνη** Dōdōna, the most ancient Greek oracle and cult center of Zeus, matches Ddwn, the name of the form of Zeus' Egypto-Libyan counterpart Am(m)on that was worshipped at the Siwa oasis in the Western Desert, also a cult center and oracle. Priestesses at Dōdōna told Herodotos of specific links between Dōdōna and Siwa.²

Thus, this proposed loan has the three necessary semantic points. On the phonetic side, there are three consonants in the proper sequence and one vowel—four points altogether, one more than the necessary three correspondences. Therefore, as a whole, the Egypto-Libyan etymology of the Greek toponym is virtually perfect.

A derivation of the Greek **κόσμος** (H) from the Semitic root $\sqrt{\text{qsm}}$ provides an example of a strong etymology. The relationship with the English “cosmos” and “cosmetics” comes from the basic sense of the Greek word as “order, organization” and the verb *kosmēō* “to set in order.” The Semitic $\sqrt{\text{qsm}}$ means “to allocate, assign,” especially of a divinity. *Qāsam* appears in biblical Hebrew in the limited sense of “to practice divination.” There is no reason, however, to doubt that Canaanite retained the basic meaning of “to assign.”³ The phonetic parallel between Greek and Semitic is 3 out of 3 and the semantic 2 out of 3. Thus it should be considered a “strong” etymology.

An apparently “strong” etymology is the derivation of the Greek **χαλεπός** (H) “painful, cruel, severe” from the Egyptian *ḥrp*; “baton of office govern, control,” *ḥrpw* “mallet” and *ḥrpt* “dues, taxes.” Here the phonetic equation is perfect, but semantic parallel, although reasonable, is less so. It is, nevertheless, reinforced by a similar word **κόλαφος** (2) “punch, beating.”⁴ Thus, so far, I would award the Egyptian etymology of *khalepós* five points.⁵ In this case, however, one encounters a problem not faced by Vycichl who was only considering correspondences within Afroasiatic: that of competitive Indo-European etymologies. A strong Indo-European cognate for a Greek word eliminates all except the exceptionally good Afroasiatic alternatives.

To continue with *ḥrp*; and *kólaphos* “punch, beating,” Chantraine relates this and **κολάπτω** *koláptō* (5) “gash, cut” but also “to hammer, destroy by hammering” to the Lithuanian *kalù*, *kalti* “forge” and **κόπτω** *kóptō* (H) “punch, strike” to the Lithuanian *kapiu* “cut, hit.” While the latter is possible, the relationship between *koláptō*, *kalù*, and *kalti* is weakened by the improbability that speakers of Proto-Indo-European (PIE) forged metal. In any event, unlike the Lithuanian competitor, the Egyptian *ḥrp* and the nominal form *ḥrpw* “mallet” match *all* the consonants of *kólaphos* and the final *-tō* in *koláptō* can be explained as a verbal suffix. The Indo-European competitor only reduces the Egyptian etymology for *khalepos*, *kolaphos* and *koláptō* by one point leaving it with four. Therefore, it is still “reasonable.”⁶

Examples of strong etymologies from both Indo-European and

Afroasiatic, like that of *érebos* “place of darkness” or *harpē* “sickle, scimitar,” should be carefully balanced. I discussed the case of *érebos* in the last chapter and in an earlier work.⁷ The eminent classicist Walter Burkert, following a scholarly tradition going back to the nineteenth century, derives *harpē* from the Semitic root $\sqrt{\text{hrb}}$ found in the Hebrew *hereb* < **harb* and the Aramaic *harbā* “sword,” which were originally curved.⁸ The idea of curvature and a sickle is strengthened by the Egyptian *h3bb* or *h3b* “crookedness”; the first of these forms is written with two jaws. Heinrich Lewy, however, found a strong Indo-European etymology in the Latin *sarpio* “cut vines,” and the Old Church Slavonic *srupu* “sickle.”⁹ In general it would seem best to set both out and consider the possibility of a convergence. Other things being equal, however, we should give the benefit of the doubt to the genetic claim.¹⁰ In this case, however, circumstantial evidence backs the Semitic $\sqrt{\text{hrb}}$ as at least one source of *harpē*.¹¹

The corresponding phonetics of all of the etymologies referred to above are attested in transcriptions or generally accepted etymologies. Other correspondences, however, are not so recorded but become plausible when one looks at the changes that took place within Semitic and Egyptian from approximately 3000 to 500 BCE.

SEMITIC

In Chapter 7, I described many of the phonetic developments in Greek. The language is by far the most accurately known of the three considered here. Even the Linear B script of the Mycenaean period marks both consonants and vowels (although crudely) in its syllabary. The Greek alphabet provides good information on both consonants and vowels. Furthermore, in the Hellenistic period, after Alexander’s conquests at the end of the fourth century BCE, the prestige of Greek and the need to teach it accurately to non-Greek speakers led to massive scholarship on its accentuation. This scholarship has been preserved. The transcription of Greek words and names into Coptic and Hebrew provides further information on pronunciation from the third century BCE.

Ancient Egyptian and West Semitic present greater difficulties. To begin with, there is the definition of terms. I use “West Semitic” to encompass all the Semitic languages spoken along or inland from the Levantine coast in the last two thousand years BCE. These include Amorite, Aramaic, Ugaritic, and the Canaanite dialects. Eblaite written in Syria in the Third Millennium is a marginal member of this group.¹² I accept

the conventional, but arbitrary, definition of “Canaanite” as the West Semitic language spoken in the southern Levant after 1500 BCE and before the triumph of Aramaic that followed the successes of the Babylonian and Persian empires in the sixth century. By far the most famous of the Canaanite dialects are Phoenician and Hebrew, spoken throughout the First Millennium BCE and into CE.

Eblaite and Amorite were written in syllabic cuneiform. Thus it is possible to reconstruct at least an approximate vocalization for them. All the other West Semitic languages and dialects, however, were written with alphabets that fundamentally represented only consonants. The most purely consonantal script was the Phoenician. More archaic alphabets did, however, provide some indications of vocalization. The Ugaritic alphabet included three alephs ʾa , ʾe/i and ʾu , and Hebrew used the two semivowels /w/ and /y/ as well as /h/ as *matres lectionis* to indicate rounded, frontal and broad vowels respectively. From these, one can gain a general sense of the vocalization. For the later period this sense is reinforced by transcriptions of many names, and some words, into Greek and Latin. The most important Greek texts are the translation of the Old Testament into the Greek Septuagint *circa* 250 BCE; Josephus’ retelling of its “historical” contents in Greek in his *The Antiquities of the Jews* in the first century CE; and the New Testament’s rendering of Hebrew place and personal names into Greek.

The phonetic equivalencies established by these transcriptions form the basis of those I propose for loans from Semitic into Greek listed in Appendix A. I do not feel the need to justify them for individual loans but I offer justification when I go beyond them.

An even better source for the early vocalization of West Semitic and Canaanite comes from within the tradition itself. Between the sixth and the tenth centuries CE, Jewish scholars, convinced that the efficacy of prayer and ritual depended on accurate pronunciation, set up a number of systems of diacritical marks or “points.” These indicated, among other things, quality (although not quantity) of vowels. The culmination of this tradition and unification of these systems came in the tenth century with the standard so-called Masoretic text.¹³ The Masoretic system drew on a very ancient and conservative tradition and, therefore, almost certainly indicates the Hebrew pronunciation of the First Millennium BCE.

Major shifts in both vowels and consonants in West Semitic took place during the last two millennia BCE. Hebrew and Phoenician dialects differed in pronunciation. Phoenician provided the most loans into Greek

between 1200 and 300 BCE. The Phoenician shifts in this period /o/>/u/ and /u/>/ü/ were discussed in Chapter 5.¹⁴ Nevertheless, the Hebrew consonantal alphabet and the Masoretic system of vowel markers have provided a good basis for making assessments for both earlier and later loans.

Vowels

Another problem is that Afroasiatic languages frequently have *ablaut* or vowel alteration to mark differences of tense, mood, activity, causation etc. in verbs. These alterations can also distinguish verbs from nouns, as well as mark the difference in number among nouns (compare the Indo-European verbal roots sing, sang, sung, song or bind, bound, band, bond). For instance, the Hebrew verb with the root $\sqrt{\text{ktb}}$ “to write” is transmuted *kātab*, *yiktōb*, *kəṭōb*, *kōṭēb*, *niktab*, *kittēb*, *kuttāb*, *hiktōb*, *hāktāb* and *hitkattēb*. Such distinctions are particularly difficult when only the consonants are indicated. When assessing the probability of loans, we can find it hard to know which form would provide a likely etymon.

Consonants

As with the vowels, the basis for the phonetic parallels between West Semitic and Greek consonants given here will be those proven by the transcription into Greek of the Phoenician and Hebrew texts mentioned above. Attention is paid to the initial, medial and final position of the consonants and, as far as possible, to their position in relation to the vowels of the pointed Masoretic text.

Some of the consonantal transcriptions are surprising and worth mentioning here. They include Semitic /b/ to Greek /m/ and vice versa; /d/ to /r/ and vice versa; initial r- /for n- and medial -n- for -r-; *tsade* is transcribed as /s/ in all positions; /z/ as initial and final; /t/ as initial or final; /ss/tt/ in medial or final. Complications of the Greek transcriptions of /š/, /ś/ and /s/ will be discussed in Chapter 13. Earlier West Semitic sibilants lost in Canaanite caused still more confusion. For instance, the West Semitic form *ṭḥn* “distant place to the north and source of violent winds” appears to have produced ζέφυρις (H) “west or north-west wind, violent storm”; ζόφος (H) “darkness, obscure region, the west”; ψέφας (ḡ) “obscurity and gloom”; δνόφος (H) “obscurity and gloom”; κνέφας (H) “obscurity, and gloom” and δουπος (H) “heavy distant noise

of battle.” Finally, we find **Τυφῶν** or **Τυφῶν**, mythical father of the winds as a word “torment, storm.” In later times **Τυφῶν** was seen as the Greek counterpart to Seth, the wild god of wilderness outside the Nile Valley.¹⁵

Other West Semitic transcriptions into Greek also demonstrate their great antiquity. An example of an early transcription of *g* as *g* before the merger of *gʾain* with *ʾain* around the middle of the Second Millennium comes in the city name called ʾGazzeh in Arabic **Gḏt** in Egyptian and **Γάζα** in Greek but ʾazzâh in later Canaanite. See also the city name Megara, to be discussed in Chapter 20. These parallel the names of Byblos and Tyre, which can be shown on phonetic grounds to have been standardized before 1400 BCE.¹⁶

Therefore, the toponyms were introduced into Greek before the phonetic shifts around the middle of the Second Millennium. These and the discovery of Semitic loan words on tablets in Linear A and B all confirm the possibility of older West Semitic influences upon Greek widening the phonetic range when looking for loans between them.

EGYPTIAN

Vowels

The reconstruction of the Egyptian language for early periods shares the uncertainties of West Semitic, as well as possessing other difficulties. With few exceptions, the ancient writing systems—hieroglyphic, hieratic and demotic—only indicate consonants. Problems with these will be discussed below. Coptic, the latest stage of the Egyptian language, written with the Greek alphabet, and supplemented by a few signs drawn from Demotic, was vocalized. Even here, however, the vowels are not altogether clear. For instance, Joseph Greenberg argued against convention that the /*ω*/ and the /*H*/ in Coptic should not be read, as they are in Greek, as long vowels /*ō*/ and /*ē*/, but as vowels of a different quality.¹⁷ Before Greenberg’s challenge, scholars felt able to deduce the length of vowels from Coptic. As Alan Gardiner, author of the still standard *Egyptian Grammar*, put it, “scholars have succeeded in determining from the Coptic the position and *quantity* of original values in a large number of words; but the quality is far less easily ascertainable.”¹⁸

In general, however, Gardiner was extremely skeptical: “The vowels and consonants of the older language have usually become modified in

the course of time, so that the more recent can at best only serve as the basis for inference.”¹⁹

Gardiner wrote in the first half of the last century. Even today, however, the precariousness of the reconstruction of Middle Egyptian vowels is illustrated by the work of Antonio Loprieno, who is devoting his scholarly life to the study and systematization of Ancient Egyptian. He writes that the

divorce between methodological requirements and philological evidence has urged modern scholars to draw a distinction between two realities underlying our historical study of Egyptian: (1) the linguistic system resulting from a regular application of the morphophonological rules of derivation of Coptic forms from Egyptian antecedents, conventionally called “pre-Coptic Egyptian”; (2) the forms which emerge from the actual reality of Egyptian texts, i.e. “hieroglyphic Egyptian.” The reasons for the fact that “hieroglyphic Egyptian” appears much less regular than “pre-Coptic” are twofold. First . . . the Egyptian graphic system. . . . There is also another aspect to this issue. . . . The reconstructed “pre-Coptic Egyptian” is an *idealized* linguistic system: even if the rules for its reconstruction were all correct, which is in itself very doubtful, this redundant system would still not be a mirror of an actual historical reality . . . the actual historical manifestations of Egyptian were probably less regular than reconstructed “pre-Coptic,” but more diversified than is betrayed by “hieroglyphic Egyptian.”²⁰

Loprieno’s concern here is with morphophonology, but his strictures on the artificial or idealized nature of “pre-Coptic” hold for phonology as whole. To further complicate and enlarge the range of the vocalization of possible loans into Greek, Egyptian, as an Afroasiatic language, appears to have had *ablaut* in both verbs and nouns, just as Semitic did.

A further difficulty in considering loans from a language in which only the consonants are recorded is that usually one is unable to tell whether a medial consonant was flanked by vowels or consonants. These positions put consonants under very different pressures. For instance in Chapter 5, innovation number 4 was the disappearance of initial and intervocalic /s/.²¹ Those next to other consonants survived.

Consonants

I shall begin with the conventional view as modified from the Egyptological traditions of the nineteenth century, based on Coptic and parallels with Semitic. According to this view, the series of voiced and unvoiced stops was complete /b/, /p/; /d/, /t/ and /g/, /k/. The only clear survivor of the emphatic series was /q/ (often written k). The *ʿayin*, which is assumed to have resembled the Semitic sound, still found in Arabic, of closing the pharynx, is also supposed by some to be emphatic. This was opposed to the sign corresponding to the Semitic [>]*aleph* or *yod*, transcribed as i. In addition to these the earlier palatalized sounds *g^y and *k^y in Afroasiatic appear to have become *d^y and *t^y and are conventionally written d and t by Egyptologists.²² (D was also found to parallel the Semitic emphatics /ṣ/ and /ṭ/.)²³ In Late Egyptian, starting throughout Egypt around 1600 BCE, the *d^y and *t^y tended to fall in with /t/ and /d/. Furthermore, the /q/ often merged with the /k/. The “oppositions between voiced and unvoiced phonemes became gradually neutralized,” in this period.²⁴

The same process of neutralization began somewhat earlier with the sibilants. Originally they were written /z/, /s/ and /š/. However, /z/ and /s/ appear to have been neutralized even in Middle Egyptian. This neutralization was the first merger between voiced and unvoiced sounds. German Egyptologists tend to keep the distinction between the two; anglophones do not, although both schools clearly demarcate /s/ from /š/. There were four different aspirates or laryngeals /h/, /h/, /ḥ/ and /ḫ/. Apparently, h was a palatalized /ḥ/ or /ḫ/, which early interchanged with /š/.²⁵ /Ḥ/ corresponded to the Semitic *ḥet* and /ḫ/ to the harsh *kha* of Arabic.

Changing Egyptian forms

THE DOUBLE OR VULTURE ALEPH. The letter about which there has been the most debate is the transcription for the so-called “double” or “vulture aleph” 𐀀. Early Egyptologists working from very late Egyptian texts recognized that this sign merely indicated modified vowels. Therefore, they saw it as an alternative aleph. In the twentieth century, however, scholars began to realize that in Middle Kingdom texts the sign was used to represent Semitic personal and place-names containing /r/ or

/l/. Scholarly tradition dies hard, however, and until some thirty years ago most Egyptologists still thought of /ʕ/ as a glottal stop.²⁶

Work on Afroasiatic as a whole has greatly strengthened the interpretation of /ʕ/ as a liquid by showing the number of cognates with /l/ and /r/ not merely in Semitic but also in Chadic and Berber. Thus, now the debate is between the German linguist Otto Rössler and his disciples who claim that in early Egyptian /ʕ/ was *always* a liquid or “uvular trill” and others who are reluctant to give up the idea that it was sometimes a glottal stop.²⁷ Those who are not complete Rösslerians debate as to proportions. Some, like Orel and Stolbova who are lexicographers of Afroasiatic, still maintain that the basic sound was ^ʕ*aleph* though they admit that some “double alephs” were liquids.²⁸ Others, like Antonio Loprieno and Gabor Takács, see /ʕ/ as basically a liquid but with some correspondences to Afroasiatic glottal stops.²⁹ This seems to me the most reasonable position. The change from liquid to vowel modifier took place during the New Kingdom. It is impossible to be more precise as to when, during that period of almost 400 years (1575–1200), the transformation took place. It was certainly an unclear, drawn out and patchy process.³⁰ The letter 𓂏 transcribed as /r/ went through a similar transformation somewhat later. We know, from a number of loans in which the Greek form has retained both the Egyptian s- and /ʕ/ as a liquid, that the general Egyptian vocalization of a /ʕ/ took place after the Greek shift sV>hV and VsV>VhV.

In their criticism of the linguistic aspect of my work, Jay Jasanoff and Alan Nussbaum were appalled by what they saw as my lack of rigor in proposing different values for /ʕ/ in Greek words derived from the Egyptian. They wrote in reference to my etymology of the Greek *kār* / *kēr* (H) from the Egyptian *kʕ* (which will be discussed in Chapter 10³¹), “From the phonetic point of view the equation is hopeless: neither here nor anywhere else is there a shred of evidence to support Bernal’s oft-repeated claim that Egyptian ʕ was sometimes borrowed as /r/ in Greek.”³²

Here one must ask whether the difference lies with the observers or in the situation itself. Earlier scholars never considered the possibility that the liquids in Greek words could be derived from /ʕ/ because, as already discussed, until some thirty years ago, most Egyptologists still thought of the /ʕ/ as a glottal stop. In addition, despite their acknowledgment that the name Aigýptos (from the Egyptian Ḥt k3 Pth) was in use in Mycenaean Greece, linguists have not considered the possibility of loans from Egyptian into Greek before the First Millennium BCE. Thus,

in establishing etymologies of Greek words, they only used the sound values of very late Egyptian. We now know from texts and archaeology that there was close contact around the East Mediterranean during the Second Millennium.³³ Thus, one cannot refuse to consider the possibility of loans from Egyptian words *both* during the period when /3/ was a liquid *and* after it was merely vocalic.³⁴

LOANS AND PHONETIC CHANGES IN THE DOUBLE ALEPH

1. k3m. A cluster of early Egyptian words—*k3nw* (later *k3m*), “garden vineyard” “garden, vineyard, flowers,” and *k3ny* (later *k3mw*) “vintner, gardener, wines, fruits vegetables” offers an example of phonetic changes having different results in loans. The earliest loan from this cluster seems to be from *k3ny/w* in the sense of “vintner” to the divine name κρονος. Kronos’ most famous deed was the castration of his father Uranos using, according to Hesiod, an ἄρπην καρχαράδοντα “jagged toothed sickle.”³⁵ This suggests an ancient implement of flint set with microliths.³⁶ The importance of this violent act is brought out by the fact that the symbol of Χρόνος (H) “time” (see below) with whom Kronos was later confused, was his scythe.

Clearly, *k3m* was related to the West Semitic *karm the Hebrew *kerem* found in Carmel (hence, through Carmelite nuns, “caramel”). The Semitic form may well have influenced the Egyptian change of final consonant from -n to -m during the New Kingdom.³⁷ Because of the relationship between Egyptian and West Semitic, it is difficult to tell which of the two languages a Greek form was borrowed from. In the first place, there are the extensions with both -n and -m of the word κλάω (H) “to break, break off.” These include κλών (5) “twig, branch” (clone), κλωνίτης “with shoots,” κλωνίζω “to trim, a tree and vine.” With -m there are κλήμα, “vinestock or shoot” and κρεμάννμι “to hang like grapes.” None of these have generally accepted Indo-European etymologies.³⁸

The development in Egyptian seems to have been *karm > *ka>m > *kām, and with the shift ā > ō, *kōm. In Coptic it is palatalized to ẽm, “vineyard, field, garden” and ẽme “vintner, gardener, someone who prepares wine or oil.”³⁹ Greek has a cluster of words around κῶμος (4), which has no satisfactory Indo-European etymology but does have a general sense of “revelry associated with alcohol.”⁴⁰ Α κωμασία was a “joyful procession of the gods in Egypt.” Α κωμαστής was a drinker who took part in the festival; the word was also a biname for Dionysos. The best-known

derivatives of *kōmos* are **κομφῶδός** (4) “singer who leads the *kōmos*.” This leads on to **κομικός** (4) “comic.” Finally, there is **κῶμα** (H) “profound sleep” or “lethargy,” the aftereffect of revelry? Brugmann associated *kōma*, with slight difficulty over the length of the vowel, with **κεῖμαι** “lie down.”⁴¹ Chantraine considers this a possibility but still finds the etymology of *kōma* “obscure.”

2. tšš. The Egyptian *tšš* became *ts*, in Demotic and *thošš*, *thōšš* in the Bohairic dialect (B) and *tošš*, *toš* in the Sahidic dialect (S) and in Coptic. For simple geographic reasons, the northern Bohairic dialect is, in general, more likely to have influenced Greek. The meaning of *tšš* was “border.” In irrigated land, boundaries are often demarcated by ditches or canals. It is, therefore, not surprising that before the New Kingdom the determinative with which *tšš* was frequently written was a simplified variant of  (N36) “canal.” This form was more widely employed as a determinative for lakes, rivers and seas. It was used, for instance, in the standard word for “sea” *wšd wr*.⁴² A case will be made in Chapter 16 that a Semitic word for “canal,” with the consonantal structure √plg, is the etymon of **πέλαγος** (H) “high sea.” This provides an interesting parallel.

Tšš, which Vycichl reconstructs as **tāšš*, provides a reasonable etymon for **θάλασσα** (H) “sea” in Greek, a word that has mystified scholars for centuries.⁴³ Both Frisk and Chantraine see it as a loan word. The more restricted sense of *tšš* may be reflected in **τέλσον** (H) “edge of a field.” Vycichl points out a plural writing *tšš-w* which he interprets as **tišš-w*. This interpretation could explain the front vowel in *telson*. Frisk says it has no “sure etymology.” Chantraine, too, describes it as “uncertain” but sees the edge of a field as where the ox turns around and, therefore, links it to the Indo-European root **k^wel* “turn.” If we accept that the sign conventionally rendered as /š/ had changed from *h>š* by 2500 BCE (see below), the borrowings of *thálassa* and *telson* must have taken place after that date. Normally /3/ lost its liquid quality in the second half of the Second Millennium BCE. A Late Egyptian writing  3w, however, indicates that in this case the “vulture” >*aleph* retained a consonantal value rather later.⁴⁴ Thus, the two words could have been borrowed in this period. A third possible borrowing is **θῆς** *thēts* (H) “sand bank, beach shore,” which could be a later borrowing after /3/ had become purely vocalic. Chantraine states that *thēts* had “no etymology.” Frisk declares that it was “without satisfactory explanation,” and goes on to list some unlikely ones. The main difficulty with a derivation from *tšš*

is that *thīl*s was most frequently used in cases with a final -n, accusative *thīln* etc.

In the *Book of Coming Forth by Day* (still widely known as *Book of the Dead*), *t3š* with a walking determinative indicated “to walk the bounds, fix the limits.” In Demotic *tš*, probably pronounced **tāš*, meant “to define, arrange, assign.” In Coptic *tōš*, also derived from *t3š*, signified “to limit, fix, assign, decide.” The Greek verb **τάσσω** (5) means “to place, set in order, assign, prescribe.” The only problem arises from other forms of the verb from what appears to be root *tag-*. This root is linked to the word *tagós* “commander.” The confusion seems to have been of the type found in spoken English between “brought” and “bought.” A further complication comes from the Egyptian verb *ṯs*, *jōs* in Coptic with a meaning “marshall troops, order, arrange.”⁴⁵ Thus, the two Egyptian verbs played important roles in the formation of *tássō*, which is not only the semantic correspondence but also a phonetic irregularity in the Greek verb. Both Frisk and Chantraine are puzzled that the form is *tássō* not **τάζω* *tázō*, which is to be expected from *tag-*. Both lexicographers agree that *tássō* has no etymology.

Since /3/ was an extremely frequent letter in Egyptian, many possible and probable loans into Greek comes from words containing that letter. Many others will appear later in this chapter and in the volume as a whole.

RÖSSLER’S PROPOSAL. Rössler did not limit his radical approach based on comparative Afroasiatic to /3/. He called for a reassessment of some other Egyptian “letters.” Other specialists in Egyptian language treat these reassessments with skepticism, just as they have reacted to his rigidity in refusing some of the conventional correlations.⁴⁶ Nevertheless, one of his proposals fits very nicely with what I see as a pattern of loaning into Greek. Specifically, his claim that  (N37), the sign conventionally rendered /š/, was originally pronounced as /ḥ/ can be seen as part of this pattern. The Hebrew /š/ was transcribed into Greek as **χθ**, /khth/; **σχ**, /skh/; **σκ**, /sk/; or **ξ**, /ks/ and, finally, as simple **σ**, s. There is no reason to suppose that the Egyptian /š/ was treated very differently. In the Late Period, first /ḥ/ and then /ḥ/ merged with /š/.⁴⁷ According to Rössler’s student Frank Kammerzell, the first shift of  towards /š/ took place during the Old Kingdom, that is, in the first half of the Third Millennium BCE.⁴⁸ If this dating is correct, and it might well not be, loans in which the Egyptian /š/ was rendered as **χ** or **κ** would

have occurred before the Indo-European speakers arrived in Greece; at the end of the ceramic periods, Early Helladic II, *circa* 2400, or Early Helladic III *circa* 1900 BCE. If such is the case, either they were part of the “pre-Hellenic” substrate or they were introduced into Minoan culture in the Early Minoan period and transmitted to Greece at some later stage. If the first hypothesis is correct, the problem arises that many such words would have been preserved, while the Indo-Hittite substrate has left little trace. An explanation for this situation could be the similarities between Indo-Hittite and Indo-European. These similarities would obscure borrowings from Indo-Hittites. In addition, these postulated Egyptian words tended to represent objects, concepts and processes that were underdeveloped or missing among the newcomers. Later renditions of □ could have been introduced to Greece and Greek directly or indirectly through Crete.

EGYPTIAN /š/ INTO GREEK. As the correspondences /š/ □ to χ or κ are even more controversial than those from /ʒ/ to /r/ or /l/, I feel it necessary to provide a number of plausible examples. I shall start with those in which the Greek word begins with /k/. There is no difficulty with the alternation χ/κ. Attested loans from both the Egyptian and the Semitic /h/ are frequently rendered /k/ in Greek.⁴⁹ Proposed etymologies in brackets are uncertain.

1. š-k. šʒw, “coriander”; **κορίαννον** (κόριον), Linear B, plural *koria₂dana*. Chantraine and Frisk see this word as “Mediterranean.”

šri “son, lad”; **šrit** “daughter, girl, maiden;” **κόρος, κοῦρος** “lad, young man” and the feminine, “lass, young woman.” **κόρη, κόρυη**, Arkadian **κόρFa** Linear B, *kowo, kowa* but also *kira* “little girl.” For Chantraine, the “least improbable etymology” was from **korpo* “*korwos in the sense of “to nourish” and was parallel to the Armenian *ser* “race, descendants” or Lithuanian *sarvas* “armor, man at arms.” The long /ee/ or /ē/ in the Coptic *šere* (S) and *šeri* (B) would seem to indicate an earlier stressed /ū/ for šri.⁵⁰ Vycichl reconstructs a form *šōryat for šrit. Vycichl did not consider Rössler’s reconstruction, which would have been **khōryat*. A related word **šrr** “young, junior” was borrowed into Greek as **χείρων** “inferior” (see below).

šrt “kind of grain” attested in the Late Egyptian **šrit** “barley”; **κρῖθή** (H) “barley.” Chantraine and Frisk see it as either a “traveling word” or a cognate with Anglo-Saxon *grotan* “groats.”

χίδρον (5) “fresh grain.” Chantraine, “no etymology”; Frisk, “probably a foreign word.”

κάχυρος (4) “grilled barley.” Chantraine links this to **κέγχρος** (H) “millet,” which he sees as a reduplication possibly linked by metathesis and a hypothetical form *kerkono *kerkonos to the Old High German *hirso* “millet.”

Wšbyt (5) “beads” **ὄκκαβος** “bracelet.” Chantraine gives no etymology.

2. š-χ. š3 “field, meadow, marsh swamp, country as opposed to town”; **χώρα** (H) “place, partly occupied, volume, contain, countryside.” Frisk links it to **χήρα** (H) “widow” in the sense of “empty.”⁵¹ There may be some confusion of the two roots here. Chantraine’s student and successor Jean-Louis Perpillou, who prepared the last section of the *Dictionnaire*, also tentatively invokes **χορός** (H) “place for dancing, chorus.”⁵² **š3**, with a prothetic a-, was later borrowed as **ἄσις** (H) “fresh mud” and (**ἄσιος**) as an epithet for **λείμων** “meadow.”⁵³ Chantraine states “unknown”; Frisk writes “not securely explained.” They both cite an improbable etymology from the Sanskrit *asita*- “dark.”

š3 only attested in Late Egyptian, “to go aground, founder,” **χοιράς** (7) “reefs, promontaries and their vicinity.” Perpillou claims a common association of pigs (**χοῖροι**) with rocks. **Χοῖρος** “pig” itself may come from yet another Egyptian **š3** “pig.”⁵⁴

š3 “to ordain, predestine”; Late Egyptian **š3y** “destiny”; Middle Egyptian **š3w**; Demotic, **šy**; Coptic (S) **šai** “fate.” The indeclinable **χρή** (H) meant “necessity, obligation, duty.” **χρείων** (H) was “giving an oracle” and the stem **χρησ-** (5) was concerned with truth and oracular responses “to enquire of an oracle.” Some of the forms, seen as derivatives of **χρή**, however, derive from an Egyptian cluster that appears to be related not only to **š3** “to ordain, predestine” but also to **š3w** “weight, worth, value”; **š3wt** “fitting things”; the phrase **n-š3w** “fit for, in the capacity of” and **š3yt** “dues, taxes.” **χρείος** (H) and its compositions center on the concept of debt. **χρεία** (6) meant “need” but also “service, employment” and the abstract **χρήμα** (H) “wealth, revenue.”⁵⁵

Frisk emphasizes that the form of **χρή** was unique and that the etymologies were completely hypothetical. Of those Frisk sets out, Perpillou prefers “despite the difficulties” linked to a root *gher found in the Latin *hortor* “he will want” and, ultimately, to **χαίρω** “rejoice.”

š3i “bundle” **š3yt** “taxes, dues”; Late Egyptian **š3t** “property” **χάρτης** (5) “roll of papyrus.”⁵⁶ Chantraine insists that it is the roll, not the papy-

rus, that is important in the Greek word. Like Frisk, he agrees that the word should be a loan from Egyptian. He continues, however, “this is not supported by any linguistic argument.” Rössler’s reconstruction has now provided one.

š3^c-m “from the beginning on”; **χρόνος** (H) “time.” On its own, **š3^c** means “beginning” and **š3^c t3** was a term for the creation of the earth. It is interesting to note that *khronos* was seen as the first principle before the creation, in the Sidonian cosmogony reported by Eudemus of Rhodes and in that of Pherecydes of Syros.⁵⁷ After the end of the New Kingdom **š3^c-m** became **š3^c-n**. Because of the ancient values required of /š/ and /ʒ/, this cannot be the source of **χρόνος** and the change must have taken place in Greek. There are many similar examples, take for instance, *nm(w)* > **νᾶνος** “dwarf.”⁵⁸

The evidence on vocalization does not help this etymology in that the Coptic value of **š3^c** is *ša*. All one is able to say is that a reconstruction of **š3^c-m** as *ḥr’o-m is possible as *ʿayin* is often associated with back vowels.

If there are problems with this Egyptian etymology, greater difficulties exist for those from Indo-European. The enthusiast for “Pelagic” origins, A. J. Van Windekins, sees it as linked to **κείρω** “cut.”⁵⁹ Chantraine-Perpillou is scathing about this. According to them, this linkage “excludes in every way the definition reported above [Chantraine-Perpillou’s lemma] and the notion of constant duration.” Perpillou then speculates that it might be related to the Avestan *zrvan* “time duration” and concludes, “anyhow the etymology is unknown.” Frisk lists various etymologies without accepting any.

šw “emptiness, air.” **Šw** the god of air provides an excellent etymology for **χάος** (H) “emptiness, infinite space.”⁶⁰ In Egyptian cosmogonies **Šw** played a central role in the creation usually by separating earth from sky.⁶¹ In Hesiod’s *Theogony* **Kháos** was the first being or principle of the creation.⁶²

Takács, who is generally skeptical of Rössler’s reconstructions, admits that the Arabic *ḥawiya* “to be empty” provides a reasonable Semitic cognate for *šw*.⁶³ Chantraine and Frisk reasonably established that the root is ***χάΦος** **kháwos*, which fits a derivation from *šw* very well. They then go on to the much more dubious proposition of associating *kháos* with **χαῦνος** “spongy, loose,” and metaphorically “empty, frivolous.” They place this with the Balto-Slav and Germanic cluster *gaumen*, “roof of the mouth” (our “gum”).

Šrr “younger, small, lowly man” is clearly related to **Šri** “lad,”

discussed above. The Greek χείρων “inferior in rank, strength or skill” is conventionally linked to the Sanscrit *hrasva-* “short, small.” Chantraine is not convinced and describes the etymology as “uncertain.” The number of variants suggests a loan. These include the epic χερείων and the Aeolic χέρρων. The latter is interesting because of the double /rr/, which would seem to indicate preservation of an original *šrr*. The final -ōn is simply a suffix of comparison.

š3 “many, numerous, plentiful, rich”; š3t “the many, the masses.” The term š3-r “of mouth, loquacious” and š3 hrw “noisy” suggest a swarm. Also, ὄχλος, *okhlos* (5) “crowd, mass, multitude, multiply, plentiful.”⁶⁴ The vocalization of *ʿain* in both Egyptian and Semitic was usually with the back vowels /o/ and /u/. The pejorative use of οἱ πολλοί *hoi polloi* “the many” would seem to be a calque from š3. Chantraine, like Frisk, emphasizes the aspect of movement and agitation and associates it through a hypothetical *φοχλος with the Old Norse *vagl* “perch” and on to *vog* “lever,” suggesting motion. Frisk tentatively links this to μόχλος (H) “lever.” This, however, has a better Egyptian origin in *mḥ3t* “balance.”⁶⁵

Another Greek term for “multitude” is ἔθνος (H) variant ὀθνείος. Chantraine defines *ethnos* more precisely as “a more or less permanent group of individuals, soldiers and animals, nation, class, caste.” It is distinguished from γένος “family, tribe.” Unlike these factually or fictitiously biological units, *ethnos* is an administrative classification or counting. The Egyptian *tnw* is a “number” or “numbering,” and *tnwt* is a census of “cattle, prisoners etc.” The probability of a form with prothetic vowel **itnw* is increased by the existence of a Sahidic word *ato* “multitude.” Chantraine mysteriously proposes a stem **swedh*, ultimately with the third-person pronoun *ē* “he,” as the origin of this word.

To return to š3, another later borrowing would seem to be ὀχεύω (5) “to copulate, breed.” Chantraine cites Meillet as wanting to link this with ὀχλεύς, a derivative of *okhlos*. This linking seems reasonable through š3. Frisk says it is “debatable” that it is related either to ὀχέομαι “travel, ride” or is from the all-purpose etymon ἔχω (in either of two particular senses: “to overpower, a bolt which goes into a hole in the wall[!]”).

š3 appears to have been transmitted into Greek at a later stage when the uncertain sibilant /š/ was rendered χθ rather than as /κ/ or /χ/. This provides a reasonable etymology for ἔχθρος/ἔχθος “hatred, enemy.” Frisk and Chantraine derive these from εκ, *ek* or the Latin *extra* “the man outside.” Both this and the Egyptian etymologies are possible,

but, rather than explain the alternation *ékthros/ékhthos* (H) through the workings of the mysterious Caland's "law," it would seem better to see it as made up of borrowings from before and after /3/ lost its consonantal value. From the sense of "plenty, rich" (which is dominant in its Semitic cognates *ʿošer* and *ʿāšir*) appears to come *ʿšw* with the Greek prefix eu- "fortunate," in the form **εὖοχθος** (H) "rich, abundant."⁶⁶

Chantraine is not happy with an etymology from **ὄχθος ὄχθη** (H) "mound, hill, river bank, growth, pustule." Chantraine sees the final *-thē, -thos* in the words as common suffixes. The Greek word probably derives from another Egyptian *ʿšw*, tentatively translated "obnoxious," but written with the determinative **𓂏** (Aa 2) "growth, pustule or gland."⁶⁷ The final fates of *ʿšt* were the Coptic *ašai, ašē* "many, plentiful." Still more reduced was Plutarch's tentative report that the Egyptian word for "many" was *os*.⁶⁸ Without an Indo-European etymology for *okh-*, one from *ʿšw* would seem plausible if it came after the /3/ had lost its value as a liquid.

As a further example of the correspondence š-χ, there is the *šn* "type of fish," and **χάννα** (4) "sea perch." The authority on Greek fish names, D'Arcy W. Thompson, suspected that this word had an Egyptian etymology but Chantraine denies it.⁶⁹ Finally, there is the Egyptian *wšn* "wring the neck of poultry" and the Greek **αὐχὴν** (H) "neck of men or animals" and **αὐχενίζω** "break the neck of a victim." Chantraine is skeptical of all previous efforts to explain the word in terms of Indo-European. As an example illustrating both š-χθ, and š-ξ, we find *mrš* Coptic *mroš* "yellow/red dye, yellow ochre used for painting and dyeing." Greece has the doublet **μόροχθος/μόροξος** (2CE) "white clay used for painting and dyeing." Frisk argues that the alternation indicates a loan. Chantraine denies that, arguing, "this does not necessarily prove that it is a borrowing. For a parallel see the doublet **Ἐρεχθεύς/Ἐρεχσέες**." Chantraine takes it for granted that *Erekhtheús*, a founding hero of Athens, must have had a Greek name. I shall challenge this case and this assumption in Chapter 22.

EGYPTIAN M TO GREEK Φ. As mentioned above in regard to Semitic, interchanges between /m/ and /b/ were relatively common in Egyptian.⁷⁰ The hesitation is not surprising, especially as Greenberg argued forcefully that there was a Proto-Afroasiatic "prenasalized voiced stop */mb/." He also noted changes between Middle Egyptian /b/ and Coptic /m/.⁷¹ Similar alternations are found within Indo-European. Many

examples of roots found in Sanskrit with initial m- were rendered as b- in Greek, especially before a liquid /r/ or /l/. See, for instance, the Greek *brotós* “mortal” and Sanskrit *mṛtá-h* “dead” or the *blíttō* “get honey from a hive” and *méli* “honey.”⁷² Thus, it is not surprising that there are examples of Egyptian /m/ in initial or medial positions being rendered as /b/ in both Semitic and Greek.⁷³ Turning for a moment to script, in *Cadmean Letters* I have argued that the Greek letter *beta* Β does not derive from the Semitic *bet* /b/ but from the older “backed *mem*Β.”⁷⁴

The question remains whether one can go from such correspondences to argue for similar relationships between Egyptian /m/ and Greek /ph/. This involves considering the relationship between /b/ and /ph/. Acknowledged exchanges exist between /b/ and /p/ both within Egyptian and between Egyptian and Semitic.⁷⁵ There are examples of an Egyptian initial b- being rendered in Greek as φ ph. Similarly, medial -b- appeared as π /p/ or φ /ph/.⁷⁶ It should be noted at this point, that it is unlikely that φ always represented /ph/. The standard explanation for the letter φ is that it was invented to provide a symbol for the sound /ph/ analogous to the use of the West Semitic emphatic dental *tet* for /th/, θ *theta*.⁷⁷ My explanation, however, is quite different. I see the so-called “new letters” of the Greek alphabet φ, χ, ψ and Ω—those that did not exist in the Phoenician alphabet—as being in fact extremely old and coming from letters dropped from Canaanite as unnecessary after phonetic simplification. Specifically, I maintain that φ derived from the old letter φ, still attested in Ethiopic and representing an emphatic /q/. No matter whether it is glottalized or pharyngealized, any emphasis associates this velar with back vowels. Thus, just as happened with its derivative Q in Etruscan and Latin, it was rendered /k^w/ in Greek before the breakdown of the labiovelars.⁷⁸ As labiovelars most frequently simply develarized to become labials, I argue that φ became a spare labial that was eventually taken to represent the Greek aspirated /ph/.⁷⁹ There is no way of telling how quickly this process took place and it is possible that some loans from Egyptian into alphabetic Greek were made before the identification between /ph/ and φ was fixed.

Moving away from alphabets to consider the phonetics themselves, further confusion between /ph/ and /b/ comes from the fact that the former derives from an allophone /bh/ from the Indo-European series II b/bh.⁸⁰ Thus, Armenian and Macedonian cognates to Greek words with /ph/ are usually rendered as /b/.⁸¹ It is unclear when the voiced aspirated stops /bh/ and /gh/ were devoiced in Greek, but the example

of /th/, where the change had taken place, makes it likely that it was before the Mycenaean period.⁸² If exchanges between Egyptian /m/ and Greek /b/ were possible in later periods, those between /m/ and /bh/ before the shift bh>ph would be equally easy, especially as with the alternations m/b within Indo-European before a liquid /r/ or /l/. Even after that date, loans involving m>ph would seem quite possible.⁸³

Here are some examples:

mʕt “to proclaim, acclaim” in Later Egyptian and the Coptic *meeue* (S), *meue* (B) “to think, imagine”;⁸⁴ **φράζω** (H) “to indicate, make oneself understood”; **φράζομαι** “to think, imagine.” Chantraine, his student Olivier Masson and Frisk all tentatively derive these from a root *φρᾱδ and from this to φρήν conventionally seen as an “uncertain human organ, soul,” which itself has no Indo-European etymology.⁸⁵ They make the connection by first supposing that the ᾱ in *φρᾱδ “ought” to be short. They then propose that this sound derived from a vocalized /ṛ/ which leads one to think of a zero degree *φρα- of *phrēn*, which had a dative plural form φρᾱσι. After going through these convolutions, Masson describes this etymology as a “simple possibility, but semantically satisfying.”⁸⁶

A slight phonetic problem exists with the Egyptian etymology in that I have found no example of final -t being rendered -d in Greek. On the other hand, all the dentals including -t and d tended to merge in later Egyptian. The Greek word has uncertainties with different dialect renditions of /z/, /sd/, /dd/ being given for the corresponding consonant. Nevertheless, this problem weakens the Egyptian etymology to make it merely “satisfactory”—three points for semantics and one for phonetics.

mr “sick, diseased” found throughout Afroasiatic with the root *mar.⁸⁷ An interesting Greek doublet illustrates the possibility of an interchange between m and ph: **ἄφανρός** (H) “phantom, the dead, enfeebled” and **ἄμανρός** (γ) with the same meaning. The initial alpha can be explained as deriving from an unwritten prothetic i-.⁸⁸ Since a Coptic form is lacking, we have no indication of the vowel.

mr “bind, weave?” *mrw*, *mrt* “weavers” and *mrw* “strip of cloth.” The word has deep roots in other branches of Afroasiatic, also, as *mar.⁸⁹ In Greek there are **φάραι** (γCE) “weave,” for which neither Chantraine nor his student Jean Taillardat provides an etymology, and **φᾶρος**, *pauea*₂ in Mycenaean “large piece of woven cloth, tunic without sleeves.” Frisk does not accept a weak link to the Lithuanian *būrė* “sail” or *bàrva* “uniform color.”

mrw from *mrw* “weavers,” to “serfs, lower classes,” also found as *mar

“slave” in Chadic.⁹⁰ Chantraine (or Taillardat) sees the basic sense of **φᾰῦλος** (5) as “simple, ordinary, poor” leading on to “bad, lazy, etc.” There are some interesting parallel words: **ᾰφελής** (5) “simple, naive” and **φλαῦρος** (6) “mediocre, insignificant, bad.” While the lexicographers reasonably see these words as related, Frisk and Chantraine-Taillardat are unhappy with any of the proposed etymologies. The complexity of the cluster in itself suggests a loan and, if one accepts the correspondence *m>ph*, *mrw* provides a plausible etymology.

This, *mr* “ill” could provide an etymology for the Latin *malus*, *-a*, *um* “bad, physical or moral.” Although they have found an Oscan cognate, Ernout and Meillet describe the etymology of *malus* as “uncertain.”

mr̥y/mrw. These words refer to unspecified types of wood, the Greek **φελλός** (6) “ivy, cork oak.” Neither Frisk nor Chantraine-Taillardat accept the previous etymology from the Indo-European root **bhel* “to blow up.” The double /ll/ presents a problem for both the Indo-European and the Egyptian etymologies. The same problem of doubling affects another possible Greek borrowing from *mrw*: **φιλύρα** (5) “linden or other light wood.” For this word neither Frisk nor Chantraine-Taillardat have any explanation.

mrw “desert,” the Greek **φελλεύς** (4). Frisk defines this word as “uneven, stony, soil,” Chantraine-Taillardat as *garrigue* or scrubland. Chantraine linked it to *phellós* because it is covered with scrub. All these scholars are skeptical of previous Indo-European etymologies.

mr̥i “love, want, wish desire.” Vycichl accepts the possibility of Černý’s proposal that this word derives from a metathesis from the Semitic root *√r>m* “love” since “the metathesis *rm>mr* is so common.” Černý belonged to a generation that did not recognize the liquid value of /3/, but his hypothesis is made more plausible by the Egyptian alternation *i3m=im3* “kind, gentle, pleasing, friendly lovable.” Another possibility would be to link *mr̥i* to the Afroasiatic root **mar* “bind” mentioned above. On the basis of an analogy with the verb *mise* “give birth,” Vycichl reconstructs a verbal noun for *mr̥i* as first **miryat* then **miryit*. This provides a plausible etymology for the Greek **φίλος**, **φίλω** “love,” passive participle found in the Linear B *pirameno* “friend, love.” Neither Frisk nor Chantraine saw any plausible Indo-European etymology for *philō*.

It is interesting to note that, like *philō*, neither of the other Greek words for “love,” **ἐραμαι** (H) and **ἀγαπάω** (H), have accepted Indo-European etymologies and both possess plausible Afroasiatic ones. *Εραμαι* could well derive from the Egyptian *i3m* mentioned above, with the root -m in

the Egyptian one being interpreted morphologically in the Greek. The derivation of *agapáō* from Semitic has a long history.⁹¹ The predominant source has been seen as the standard Hebrew word for love $\text{ʾ}āhēb$ and the noun $\text{ʾ}ahābā$. The latter was the always translated ἀγάπη in the Septuagint. In 1985, however, G. L. Cohen and J. Wallfield proposed a derivation from a much less frequently attested Hebrew form $\text{ʾ}āgab$ “sensuous love.”⁹² Phonetically, the fit with *agapáō* is better, but Saul Levin continues to prefer $\text{ʾ}āhēb$ because of the rarity and irregularity of $\text{ʾ}āgab$.⁹³

The Indo-Europeanist Raimo Anttila recently tried to disregard the Semitic etymologies, although he admits, “the similarities are quite intriguing, but these formal problems do not overrule the solid Indo-European embedding in the social structure.”⁹⁴ Anttila’s alternative is to revive an idea, explicitly denied by Chantraine, that the initial *aga-*, which Anttila takes to mean “drive, drove,” moves puzzlingly to family or social unit. Ἀγῶ is “to drive stock”; ἄγός is “chief” and ἄγών “the place driven to, assembly.” Extending the derivation on pseudo-social, rather than linguistic, grounds and from these to the family and social unit, let alone “caring,” is pushing too far. Additionally, in general, his vague and complex scheme, ranging from Welsh to Old Danish and Sanskrit, does nothing to remove the solid phonetic correspondence between $\text{ʾ}āgab$ and ἀγαπάω.⁹⁵ What is more, Anttila’s attempt to make a semantic distinction between lust and love is equally unconvincing, when, among many other examples, the Greek ἔρω does precisely that.⁹⁶

CONCLUSION

In this chapter I have argued that in certain ways one can go beyond the phonetic limits on proposed borrowings set out in correspondences established by Greek transcriptions of Egyptian and Semitic words and proper nouns and in the loans accepted by cautious and conservative scholars (seen in appendices A and B). The renditions of two of the Egyptian phonemes /ʒ/ and /š/ can be loosely tied to specific periods. Before 1400 BCE /ʒ/ was a liquid /r/ or /l/; after that time it was a vocalic modifier. Until around the middle of the Third Millennium, /š/ sounded as a /kh/ or /k/; after that time it was /khth/, /skh/, /sk/, /ks/ and, eventually, /s/. Such correspondences with Greek also occur for the Hebrew /š/ in the later period. The occasional rendering of Egyptian /m/ as Greek /ph/ is more difficult to periodize. The only other extension to the limits I impose on myself is that of the possibility of

metathesis of a liquid /r/ or /l/ between the second and third places in a root. This I believe is justifiable because it is so common in all three languages: Egyptian, West Semitic and Greek. I do not accept other metatheses, not because they have not occurred but because if I were to accept them anything becomes possible and rules, regularities and constraints are essential to any project of this kind.

CHAPTER 9

GREEK BORROWINGS FROM EGYPTIAN
PREFIXES, INCLUDING THE DEFINITE
ARTICLES

INTRODUCTION

This chapter deals with some Egyptian particles and reduced nouns that integrated with the nouns or verbs they were modifying to the extent that they were taken into Greek as simple words. English shows a similar pattern of borrowing. By far the most common derive from Arabic words beginning with the definite article >al: alchemy, alcohol, alcove, alfalfa, algebra, algorithm, alkali and almanac. With the assimilation of >al others, such as “assegai” and “aubergine,” can also be found.

The first sections of this chapter treat the Egyptian definite articles. The development of *p3*, *t3* and *n3* *n(y)* was described above in Chapter 6.¹ They were introduced from the southern dialect of Thebes, which became the national spoken language around the beginning of the Eighteenth Dynasty in the sixteenth century BCE. Northern Middle Egyptian remained the written standard. The situation in Late Egyptian became more complicated because of the development of three related paradigms. The first of these was as follows:

Late Egyptian	Coptic	
	Accented	Unaccented
p3y	pai	pei-
t3y	tai	tei-
n3y	nai	nei-
n3		

These were stronger or more deictic than the articles, but unlike *pn*, *tn*, *nn n(y)* they were placed before the modified word not after it. In addition, *pʒw* may be another form of *pʒy*.

The second paradigm is of the possessive article, which was also placed before the word it modified:

Late Egyptian	Coptic
<i>pʒy.f</i>	<i>pō</i>
<i>tʒy.f</i>	<i>tō</i>
<i>nʒy.f</i>	<i>nō</i>

The third paradigm involves words meaning “he, she, they of”:²

Late Egyptian	Coptic
<i>p(ʒ) -n pʒ</i>	<i>pa</i>
<i>t(ʒ) -nt tʒ</i>	<i>ta</i>
<i>nʒy nʒ</i>	<i>na</i>

With all these preposed articles it is not surprising that there were many different Greek renderings from the Egyptian. As the masculine gender gained on the feminine in Late Egyptian there are many more examples of transcriptions or accepted loans from *pʒ* and its variants than there are from *tʒ* and *nʒ n(y)*.³ These loans are *p*, *pa*, *pe*, *pi*, and *po*; *phe* and *ph*. The last were usually, but not always, in the neighborhood of a laryngeal. /*b*/ and /*ph*/ can be added, if one accepts other correspondences with Egyptian *p*.⁴

Under the heading of the prefixes, Egyptian words will generally be ordered according to the Egyptological “alphabet”: *ʒ*, *i*, *ʿ*, *w*, *b*, *p*, *f*, *m*, *n*, *r*, *h*, *ḥ*, *ḏ*, *h*, *s*, *š*, *q*, *k*, *g*, *t*, *ṯ*, *d*, *ḏ*. This order will also be used in later chapters.

GREEK BORROWINGS FROM EGYPTIAN DEFINITE ARTICLE PREFIXES

*Greek borrowings from Egyptian words
beginning with the masculine singular
definite article*

***pʒ iwn** “the pillar, Παιήων *Payawo* in Linear B. *Paiēōn* was a healing deity who later merged with Apollo.⁵ This word was one of the titles of Horus, the Egyptian counterpart of Apollo. One of Horus’ epithets was

iw n mwt f “pillar of his mother.” This could be interpreted as “support of his mother.” Another title given to the god Min, K3 mwt f “bull of his mother” suggests that it may mean something rather different.

***p3 iwntyw** “the tribesman, bowmen” **Παίονες** (H) “people living to the north of Greece,” that is, in Thrace and later in Macedonia. The form **iwntyw** provides a plausible origin for **Ἴωνες** Ionians.⁶

***p3 im** “the groan” **Πᾶν**. See the discussion in Volume II.⁷

***p3 in** “the fish” **πᾶν** (2CE) “Nile fish.” Thompson in *A Glossary of Greek Fishes* is quite clear about this Egyptian derivation.⁸

***p3 ity** “the sovereign” **βάττος** (5CE) “ruler of Libya.” Chantraine states that this word comes from a “Mediterranean base.”

***p3 id** “the child” **παῖς, παιδός** (H). Julius Pokorny sees pai as derived from an Indo-European root *pōu-, pəu-, pū- “small, few.”⁹ The English word “few” itself comes from it. Pokorny, Frisk and Chantraine—basing themselves on a name Πaus found on a vase and a Cypriot inscription with the name Φιλοπαφος—have hypothesized a stem *paʃ id and see it as linked with a zero grade to the Sanskrit *putra* and the Oscan *puklum* “son.” The linguist G. Neumann, however, challenged the idea that the digamma in these cases belonged to the root.¹⁰ If Neumann were followed, the whole etymology would collapse. There is a further difficulty in the lexicographers’ inability to explain the -i- in *paʃ id, and even the final -d presents problems. Nevertheless, irregularities of accentuation in the declension of *paîs* indicate that it was, indeed, originally disyllabic. As argued in Chapter 5, however, digamma does not provide the only reason for this and loan words containing *ʾayin* or even *>aleph* can produce the same effect. Thus, *paîs*, *paidós* would fit well with *p3 id.

The Egyptian word *id* appears to derive from a form *ild. The word “lad” cannot be traced beyond Middle English. One possibility is that it is the only remnant in Indo-European of a Nostratic root. A further link is that the biliteral √ld with a voiceless fricative velar prefix kʷ[h] occurs in the Egyptian *hʷrd* “child” and in the Teutonic, especially the Gothic *kilthei* “womb,” the Anglo-Saxon *cild* [“child”], German and Dutch *kind*.¹¹ In any event, the root *wld “to give birth, child” is well established in Afroasiatic. It is found throughout Semitic and in Lowland East Cushitic.¹²

The initial consonant was unstable. It was /w/ in early Akkadian, Arabic and Geʿez, /y/ in Amorite, Ugaritic and Canaanite, and [>]*aleph* in later Akkadian. The last also appears to be the case in Egyptian. Scholars have long puzzled over the nature of the reed [>]*aleph* ⁱ. Within Afroasiatic it generally corresponds to [>]*aleph* [>]*a* or *yod* ^{*}*y*.¹³ In a number of cases, however, it corresponds to ^{*}*l* or ^{*}*r*. In the vast majority of these the /i/ is initial.¹⁴ Carleton Hodge argued cogently that this indicates that /i/ never corresponded to a liquid in the way that  the “vulture [>]*aleph*” did, but that in these cases the i- was prothetic and the intervening liquid was dropped. The classic case was the Egyptian *ib* from an original Afroasiatic ^{*}*lb*(b) “heart” via ^{*}*ilb*. The same took place with *id* from ^{*}*ild* or ^{*}*i3d*.¹⁵

Id “child, boy” appears borrowed into Greek in a number of ways. First, there is **ἴδιος** (H) “simple, inexperienced, common man, individual.” Chantraine is clearly uncertain about its etymology. He reconstructs on the basis of an Argive inscription ^{*}*Fh* édios. He sees ^{*}*Fh* é- as the old Greek third person pronoun, *hé* “enlarged by a -d-.” Chantraine sees an association with the Sanskrit *vi* “separate” as “less probable.”

A second probable borrowing is **αἰτᾶς** (5) “beloved youth.” This is generally thought to be Dorian but Chantraine demonstrates that it was also used in other parts of Greece. He describes the etymology as “uncertain” but refers to a proposal to derive it from **αἰώ** “listen.” Then there is **ἡῤθεος** (6) “celibate young man.” Chantraine’s uncertainty about the origin of this word is indicated by his statement that it is “legitimate to look for an Indo-European etymology for such an archaic word.” He then refers to a derivation from the Indo-European root found in the Sanskrit *vidhāvā* and to words in many other languages including the English “widow.” The idea is the common notion of separation found in both celibacy and widowhood.

In Linear B, the sign DE is used as an adjunct to the sign WOMAN to signal girls or boys.¹⁶ This sign would seem to be an early version of the suffixes -id and -iad and the patronymic -ιάδες or -ίδες. Generally, -id and -iad are used in the plural, as in **Νηρηίδες** Nereids and **Δρύαδες** Dryads “children of.” Despite their plausible Egyptian origin, these suffixes were “alive” in Greek and could be applied to roots of different origins. In these examples they were Semitic and Indo-European.¹⁷ There are also difficulties on the Egyptian side. There is no trace of *id* being used as a suffix or patronymic in Egyptian. Nevertheless, these etymologies from -d are plausible enough to strengthen that of *país*, *paidós* from ^{*}*p3 id*.

Against this etymology is the typological argument that “child,” as a fundamental term, is unlikely to be borrowed.¹⁸ An apparent further difficulty is that, while *p3*, as the definite article, is the defining feature of Late Egyptian, the word *id* is not attested in that stage of the language, when it was replaced by *hꜣd*.¹⁹ Even so, the recurrence of archaisms is a common feature of Egyptian. The chances in this case are increased by the fact that *id* appears in the *Book of Coming Forth by Day*, the most frequently reproduced collection of texts during the New Kingdom and the Late Period.

Taking all this into account, the semantic and the phonetic correspondences between *país*, *paidós* and **p3 id* remain more plausible than those of any of the etymology’s Indo-European competitors. Not only is the Egyptian derivation stronger semantically but it can also explain, in a way that the other hypotheses cannot, the final -d and the preceding -i-.

***p3 ‘m’ m** “the container for bread etc.” **πῶμα** (H) “cover of a jar or box.” Chantraine associates this form with the Sanskrit *pātra* etc. “receptical” and the Gothic *fōdr* “sheath.” On balance, the Egyptian etymology appears superior.

***p3 ‘r q** “the basket” **πόρκος** (4) “wicker fish trap.” Frisk and Chantraine relate this form to the Armenian *ors* “hunt,” hence, to a hypothetical Indo-European **porkos* “hunt, prey.” *Ors* could derive from many other roots, and the semantic parallel is far less precise than that of the Egyptian etymology.

***p3 ‘h3wt(y)** Late Egyptian, Demotic *hwt(y)*, Coptic *hout* “warrior, male, man,” **φῶς, φωτός** (H) “man, hero, mortal.” Neither Frisk nor Chantraine can explain this word in Indo-European terms. Jernstedt proposed this powerful Egyptian etymology in 1953.²⁰

p3 w’ b Coptic *peiub*, *uab* “the pure, the clean,”  (D6o) “priest”  (A6) **φοῖβος** (H) “pure of water, bright, luminous, epithet of Apollo.” The association with pure water is reflected in the *Hymn to Delian Apollo*: after his birth “straightway, great Phoibos, the goddesses washed you purely and cleanly with sweet water.”²¹ Hesiod also has an uncertain fragment: “He brought pure water [φοῖβον ὕδωρ] and mixed it with Ocean’s streams.”²² K. O. Müller, saw *phoibos* as “golden haired” of “unstained

purity.”²³ Discounting the “golden haired,” Müller was clearly right about the purity.²⁴ (The origin of the name Apollo from the Egyptian Hpr is discussed in Chapter 19 below.) We have encountered, and shall encounter below, other examples of the Egyptian /w/, /w^h/ or rounded consonants being rendered as -oi- in Greek.²⁵ For the present I simply offer the examples of οἶη (4) “village” from *wrt* “administrative division, quarter” and οἶβος (2CE) a butchery term for the “back of a bull’s neck” from *wbt* “meat offering.” As neither Frisk nor Chantraine can provide an etymology for *phoibos*, its Egyptian etymology is virtually certain.

p3 mr “the pyramid” *mr* written with Δ (0.24), **πυραμίς** (5). Frisk and Chantraine follow the conventional etymology from *πυραμοῦς* “wheat cakes, in the shape of pyramids,” based on *πυρός* “wheat,” developed into *pyramís* by analogy to *σησαμίς* *sēsamís* “sesame.” It is inherently more likely that the cakes were named after the ancient pyramids rather than the reverse. While the metathesis m/r required for the Egyptian etymology is generally accepted, the formation may have been influenced by *πυρός*. However, a rendering of the Demotic *p3 rmt*, Coptic p(ī)rōme “the (noble) man” as *πίρωμις* probably played a greater role in the metathesis.²⁶

***p3 nwy** Coptic *panau* “the waters, the flood.” **βύνη** (3) “sea” was also a name of Ἰνώ a fierce goddess whose worship was associated with the sea, lakes and ponds.²⁷ Her name, unexplained in Indo-European terms, may well come from a prothetic formation *inwy “waters, flood.” The hydronyms, Πηνειός and Φενεός, are discussed in Volume 2.²⁸

***p3 nr(t)** “the vulture” **φήνη** (H) “large rapacious bird consecrated to Athena.” *Nrt* was originally feminine, but it was written *nr* in Demotic and *nure* in Coptic. It was predominantly masculine in the latter. The phonetic correspondence with *phéne* is good; the -r was weak in Coptic and would have been dropped as a final from Greek. The stressed long /ū/ developed from a Late Egyptian long /ā/.²⁹ In Ionic Greek this vowel would have developed into /ē/. The semantic match is perfect. The rapacious vulture was sacred to Neit, the counterpart of Athena. Frisk and Chantraine admit that they cannot provide a persuasive etymology for *phéne*. They tentatively suggest that it may have been “white bird” and postulate an Indo-European root *bhea-s found in the Sanskrit *bhasati* “shine.”³⁰

***p3 rw** “the lion” **Πηλεύς, Πηλείων, Πηληιάδης**. In Chapter 6, I accepted William Albright’s suggestion that stressed /ū/ became -eu- before shifting on to /ē/.³¹ This shift would explain the derivation of the Greek **λέων, λέοντος** *rewo(pi)* in Linear B from the Egyptian *rw*. Chantraine denies the Indo-European proposals; both he and Frisk reject any Semitic etymologies, although they accept the derivation of **λῆς** (H) “lion” from the Canaanite *layis*. Thus, they see *léōn* as a borrowing from an unknown source. Significantly, neither the lexicographers nor Gamkrelidze and Ivanov mention the fact that the derivation of *léōn* from *rw* was accepted by their scholarly ancestors, Theodor Benfey and George Curtius.³² The Greek adoption of Afroasiatic terms for “lion” is all the more remarkable given the fact that lions were native and not exotic around the Aegean.

Strictly speaking, *Pēleús* was Achilles’ father. However, there is considerable confusion with the hero himself who is most frequently named *Pēleíadēs* “son of the lion.”³³ He is also often referred to directly as *Pēleíōn*.³⁴ Other heroes, too, are referred to as lions but with Achilles the similes are more elaborate and forceful. He is noted not merely for his speed, quick temper and violence—“shaggy breast”—but for skulking in his tent or lair. The leonine image comes out most vividly in the passage in Book 20.³⁵ The lexicographers state about the name Achilles “etymology unknown.”

The final -λεύς could possibly also derive from *rw*. The initial **Αχι-** could be the common West Semitic initial ^ʔahī- (>^ʔahī in Hebrew) “my brother (is).” This etymology “my brother is a lion” would, therefore, have to be bilingual, Semitic-Egyptian. But, given the leonine associations of *Pēleús*, *Pēleíōn* and *Pēleíadēs*, it should not be ruled out.

In addition, ^ʔah “brother” is used in many wider senses including that of “political allies.” Thus, ^ʔahēī, the construct plural “brothers,” provides a plausible etymology for the name used in Hittite texts for some peoples to their west, the *Aḫḫiyawā*. With the Greek plural marker -οί, it gives a name for the **Ἀχαιοί**, Akhaeans “the allies.”³⁶

***p3 rm** “the fish” **πηλαμύς** (4) and **πρημνάς** (4) “young tuna.” Neither Frisk nor Chantraine can find an etymology for these words and Chantraine sees *pēlamýs* as a loan. There is also **πειρήν** (1) “a fish.” Frisk does not include this word and Chantraine provides no etymology. Because of later geographical distribution, Thompson “suspects” that *pēlamýs* is Asiatic.³⁷

***p3 rmn** “the shoulder” Greek **πρυμνός** (H) “shoulder or base.” Neither Frisk nor Chantraine can provide an Indo-European etymology. The lexicographers even have trouble explaining its semantic field. Chantraine writes “what is at the extremity for body parts said of the extremity attached to the trunk.” This is difficult to reconcile with the idea of “base.” The situation is still further complicated by other words that are clearly related. There is **πρέμνον** *prémnon* “base of a tree or pillar.” Even more puzzling to the lexicographers is **πρύμνη** “poop deck.” Like the others it has no Indo-European etymology. The idea of a shoulder as a base or support is not hard, but even the “poop” is easily explained using an Egyptian etymology. *Rmn* “shoulder” has the extended meaning of “porter” and “support, pillar.” It was also used for a processional shrine carried on the shoulders. We know that such portable shrines were frequently placed on the poop decks of ships. There are in fact splendid illustrations of such shrines on the Egyptian-style boats painted in the seventeenth-century BCE frescoes at Thera.³⁸

***p3 rn** “the name” Coptic *ran* or *ren*, the Greek **φρήν** (H) “spirit, group of organs in the upper part of the body.”³⁹ As mentioned in Chapter 8 in the discussion of *phrázō*, *phrén* lacks an Indo-European etymology. Before discussing the semantic issues behind this identification of *p3 rn with *phrén*, it would seem useful to clear away phonetic problems. There is, as seen earlier in this chapter, attestation for *p3* being rendered with the letter *phi*. As for the *phr-* there is no record of *p3* having been rendered *pr, although it is likely that /ʒ/ continued to have consonantal value for sometime after the development of the definite article. As with the /r/ in *prymnós*, that in *phrén* comes from the initial r- in the word, *rn* or **ran*. The vowel /ē/ in the singular and /e/ in the plural *phrénes* provide no difficulty.⁴⁰ The semantic correspondence, too, is much less problematic than it might initially appear. Names were essential in Ancient Egyptian culture. There was, in Saussurian terms, a merging of the signifier and the signified. The *rn* of a man participated in his being and was a manifestation of his being, parallel to the body. It was sometimes identified with the *k3* (which will be discussed in Chapter 10). It was particularly important because *rn* could survive the death of the body and insure immortality.⁴¹

The standard text on *phrén* cited by classicists is that of R. B. Onians, *The Origins of European Thought: About the Body, the Mind, the Soul, the World, Time and Fate*. Onians argues, against Plato, Hippocrates and others who

identified *phrén* with the diaphragm, that the *phrēnes* (the term was more commonly used in the plural in Homer) should be identified the lungs. He agreed with conventional scholars that the word meant “wits” or was the seat of intelligence and feeling, but for him the basis was physiological.⁴² I agree with Onians that the plurality of the term is significant but I disagree with his choice of organs. I shall argue in Chapter 11 that the paired seat of intelligence was the kidneys and that *phrēnes* should be identified with the Latin *rēnēs* “kidneys,” which has no Indo-European etymology. It comes from *rn* without the article.⁴³ In any event I maintain that Onians had got hold of the wrong end of the stick, but to make my case I have to go on to the next etymology.

***p3 3bi** “the wish, the desire.” As a verb, *3bi* meant “desire, long for” or “love.” ***Rby** “love, want, wish” has deep roots in Afroasiatic.⁴⁴ For **πραπίς** (H) “spirit, seat of intelligence, desire, shrewd devices” the only Indo-European etymology is one proposed by Szemerényi. He reconstructs a hypothetical form ***prkw-i**, a derivative of ***perkus** “rib,” i.e. “something connected to the rib hence the diaphragm and even the intelligence.”⁴⁵ Apart from the far-fetched semantics, Pokorny’s reconstructed Indo-European root ***perk** “rib” could not have been a labiovelar. In this case, Chantraine is much wiser to leave it “without an etymology.” As with *phrēnes*, Onians maintained, against conventional wisdom that the **πραπίδες** signified the diaphragm, that they referred to the lungs.⁴⁶

These plausible Egyptian etymologies indicate to me that despite the undoubted great importance of lungs and breath as symbols of life in all cultures and the frequency of the plural forms of the Greek words in both cases, uncertainty about the organ indicates a spirit looking for physical site rather than a physical organ being seen as the source of the spirit. Why should Onians have put things the other way around? I believe that, despite his many references to analogies from other cultures including that of Egypt, Onians saw, as is indicated by the title of his book, that Greek and European thought was essentially autochthonous, arising in an “anthropological” way from simple notions of the body. He explicitly compares Homeric emotional images to “Levy Bruhl’s analysis of ‘primitive’ thought.”⁴⁷ On the other hand, I see Greek culture as a recasting of elements of the sophisticated Egyptian, Levantine, and Mesopotamian civilizations.

***p3 rqw** “the opponent, the enemy” was rendered in Greek in two ways:

1. **Φλέγυαι** (H) or **Φλέγυες** (δ) an early people, called **Φλέγγρα**, who lived in Thrace and the Chalcidian peninsula. The conventional etymology is from a widespread Indo-European root *bhel “bright, fiery” found in the Greek φλέγω “light, inflame.” The Phleguai were supposedly called this because they were so violent. This explanation is certainly possible but one can be more precise. Joseph Fontenrose demonstrated that the Phleguai were predominantly portrayed as enemies of Apollo and Delphi.⁴⁸ Thus, *p3 rɣw provides a more plausible alternative derivation. The Phleguai were closely associated with the Lapithai; the Egyptian origin of this name will be discussed below along with the presence of Egyptian toponyms in Thrace and elsewhere in the northern Aegean.⁴⁹

2. **Πηλαγόν** (H) and **Πηλαγόνες** a fierce hero and a people from Macedonia, enemies of Achilles and the Greeks. Kallimakhos praises Zeus as **Πηλαγόνων ἐλατήρα** “router of Pelagonians.”⁵⁰

*p3 hnw “the *hnw*, jar, measure of 1 / 2 liter” **βανωτός** (γ) “vase, utensil of measure.” Chantraine sees -τός as a suffix for a container. He sees *banō* as a probable loan. Frisk believes it is possibly Egyptian.

*p3 hm n St “the priest of Isis” **φεννήσις**- (1) “priest of Isis.” Chantraine agrees that this word is Egyptian.

*p3 har “the sack, leather bag” **πήρα** “leather bag.” Neither Frisk nor Chantraine can provide an etymology for *péra*.

*p3 s3b “the dappled, multicoloured plumage” **ψάρ** (H) “starling, speckled.” Loprieno points out that in the First Millennium BCE the Egyptian /b/ was probably “articulated as a fricative /ɸ/.”⁵¹ It was, therefore, vulnerable in the final position. The derivations of θρίον “fig leaf” from *d3bw* “figs, foliage” and of ἐλεγαίειν “mourn, wail” from *i3kb* “mourn, wail” also illustrate this vulnerability. The etymology of *psar* indicates that the Greek shift s>h antedated the disappearance of the consonantal /3/. This will be seen in other examples.⁵² Neither Frisk nor Chantraine accept any etymology for *psar*.⁵³

*p3 sbt “the wall, fort” Coptic Psabet **Ψωφίς, Ψαφίς**. These are city names in Arkadia and Zakynthos; see Chapter 20.⁵⁴

***p3 sm3** “the attachment” **πεῖσμα** (H) “stern cable with which a ship was made fast to the land” **πεισμάτιον** (2) “umbilical cord.” Chantraine states that this word is “certainly” from a hypothetical *penqsma, which comes from the Indo-European root *bhend found in the Sanskrit *bhadhnami* and the Germanic *bind*. The semantics of these two derivations are equal, but the Egyptian phonetic relationship is far more direct. *Peisma* should join *prúmnē* as examples of the many Egyptian nautical terms found in Greek; see Chapter 16 below.

***p3 smyt** “the desert” **ψάμαθος** (H) “sand” *smyt* “the desert” would appear to be the origin of **ἄμαθος** (H) “sand or dust.” Both Frisk and Chantraine see **ἄμμος** (4) “sand” as a later derivation of *ámathos*. Frisk links the original form “probably with breathing changes” to the Middle High German *sampt* “sand.” Chantraine states that the coincidence of the form in two languages does not establish an Indo-European root. He sees *ámathos* and **ψάμμος** (5) “sand, dust” as belonging to two separate stems that have influenced each other’s development.

I believe that the coincidence of sound and meaning in these two words is too great to ignore. It would seem simpler to postulate a loan from *smyt*. Before the Greek shift *s>h* *smyt* produced *ámathos* and after it resulted in *psámathos*. An alternative would be from ***p3 smyt**. Two difficulties with the latter alternative are, first, *smyt* is feminine and should take the feminine article (*t3*) and, second, *smyt* is not attested in Late Egyptian when definite articles first came into use. Regarding the first objection, the masculine singular article used with words previously seen as feminine or plural has been mentioned above.⁵⁵ As for the second, it is always dangerous to rely on absence from a limited corpus and *smyt* is abundantly attested in Middle Egyptian texts from the New Kingdom.

Even with its disadvantages the Egyptian etymology remains superior to the confusion of the Indo-European derivations.

***p3 snw, sny** “the food offerings” **βασυνίας** (3) a type of cake offered at Delos. Frisk and Chantraine describe this word as probably a loan. The cult of Apollo at Delos had strong Egyptian associations. (See chapters 18 and 19 below.⁵⁶) The derivation of *Basynías* from *p3 snw* provides a parallel rendition of *p3* for *ba* to that of **βασιλεύς**, from *p3 sr* discussed in the next section.

p3 sr in Akkadian transcription *pa-si-i-a-(ra)* “the official, vizier” **βασιλεύς** (Linear B) *qa/pa₂ sireu, pasilewose* in the Cypriot syllabary, “high

official.” There can be no doubt that βασιλεύς is a borrowed term. In addition to the fact that it has no Indo-European cognates, it cannot be Indo-European, or from any substrate, because of the extreme rarity of initial /b-/ and because the /-s-/ between vowels became -h- in Greek sometime before 1500 BCE. The word must, therefore, have originated after that date. I shall argue later in this section that the borrowing came after the labiovelars /k^w/ and /g^w/ broke down sometime later. As Frisk puts it, in his entry on the word: “beyond βασιλεύς, there are two further Greek words for “king, lord,” the certainly inherited κοίρανος the unexplained and probably foreign ἄναξ. Of these, βασιλεύς, is the youngest.”

The fact that at least two of the key Greek titles for chief or king are non-Indo-European is something that should give pause to defenders of the Aryan Model. I shall propose an Egyptian etymology for *ánax* in Chapter 10 and I express doubts about the Indo-European origin of *koíranos* in Chapter 14. Nevertheless, Frisk was clearly correct in his suggestion that *basileús* was the latest introduction. As mentioned in Chapter 7, it is interesting to note that Greek does not contain the Indo-European root derivative of *req “right”; *rēq-s, as is found in the Latin *rex*, the Irish *ri*, the Gothic *reiks* and Indian *raj*.⁵⁷

The first person who, to my knowledge, proposed an etymology for *basileús* from the Egyptian *p3 sr* “the official” was the Romanian scholar Dr. Constantin Daniel. He made this proposal in 1971 without the help of the Akkadian transcription pa-si-i-a-(ra) but also without the complication, discussed below, that John Chadwick no longer saw the Mycenaean form of βασιλεύς as *pa₂sireu* but as *qasireu*.⁵⁸ I knew from the title of his article that Daniel had proposed an etymology for βασιλεύς but I did not know what it was, until 2002. I developed the same derivation independently in the early 1980s.⁵⁹

Jasanoff and Nussbaum strongly objected to my derivation of the Greek *basileús* from *p3 sr* even though, as mentioned above, we know that it was vocalized *pasiyara* in the thirteenth century BCE.⁶⁰ The two authors appeared to have no difficulty with the semantics of this etymology. In both New Kingdom Egypt and contemporary Late Mycenaean Greece the word appears to have meant “high official,” rather than the later Greek “king.” Jasanoff and Nussbaum object to the phonetics. In the first place, they state that “the Egyptian *p* is never represented as a *b* in uncontroversial loan words.”⁶¹ The unreliability of the distinction between voiced and unvoiced stops in Egyptian was discussed in Chapter

8. Specifically, in the case of the labials, we know that the Egyptian city name Pr w3 was rendered Boutō and the Egyptian God >Inpw was Anubis to the Greeks.⁶²

The two Indo-Europeanists further objected to my claiming that *p3* followed by an /s/ could be **bas-* because, they argue, the succeeding unvoiced /s/ would have prevented voicing the initial p-. It is true that in all acknowledged loans, *p3-s-* appears as *ps* in Greek. In the list in this chapter, however, there are two other plausible examples: **p3 snw/ basunias* and **p3 sts/ bastázō*. In these examples the p-, or rather the indeterminate labial, was separated by a vowel and became voiced.⁶³

The most serious objection made by Jasanoff and Nussbaum is that *basileus* is written *qasireu* in Linear B. That is to say, the initial is a labiovelar /kʷ/ rather than a labial /p/. No doubt the sign transcribed in Linear B as /q/ represented a labiovelar when the script was first devised, during or before the seventeenth century BCE. At the other end, the poems of Hesiod and Homer indicate that the labiovelars had completely broken down before they were composed in the tenth and ninth centuries. John Chadwick wrote about this, “the pronunciation of the labiovelars remains a matter of conjecture, but the consensus of opinion favors their retention in Mycenaean.”⁶⁴ Szemerényi expressed still more uncertainty when he wrote “a much more difficult question is whether the sounds so denoted were still labiovelars [when the texts were written].”⁶⁵ When the surviving Linear B tablets were written is still uncertain. Some may have been produced as early as the seventeenth century. I accept the case made by Palmer and Niemeier that most of the tablets date from the end of the thirteenth century.⁶⁶

No one now seems to doubt that the labiovelars in front of /u/ and /y/ had been delabialized to become *ku* and *ky* before the thirteenth century.⁶⁷ Szemerényi maintains that the labiovelars broke down at different times not as a uniform set. Specifically, he argues that by the time of the tablets the labiovelars before /e/ and /i/ had palatalized and begun the process that ended in their becoming *te* and *ti*.⁶⁸ This argument leaves the problem of dating the labialization before /a/ and /o/ to become *pa* and *po*. No one doubts that *Kʷo* could be written as *po* when another labiovelar was in the same word. Chadwick, who made this point, adds, “the pronunciation of a labiovelar before a consonant is surprising, but *q* is regularly written in this position.”⁶⁹ These patterns suggest that the breakdown of all the labiovelars was taking, or had taken, place by the fourteenth century. Nevertheless, as stated above, the consensus

among Mycenologists is that the original /k^w/ was still present in the thirteenth and twelfth centuries.

The bases for this judgment, however, are very slight. The survival of labiovelars, or their “unorthodox” reflexes in later Greek dialects, tells us nothing about the date of their breakdown in the standard language represented in Linear B. Lejeune has shown that the Linear B sign for a labiovelar before /o/ is the same as that in *equos (“horse”) where the *kw* is not a labiovelar. This discovery suggests that the Linear B sign *qo* was pronounced *k^wo*. It could, however, merely reflect an earlier situation before the spelling convention was established. Furthermore, the Linear B texts contain two possible cases of early labialization. There is no evidence about *qa* specifically. Ventris and Chadwick initially read *qa* as a labial *pa*₂, but, as mentioned above, Chadwick later retracted this reading.⁷⁰ Even if one accepts Chadwick’s discrediting of his and Ventris’s earlier interpretation, that *qa* was heard as *k^wa* in the fourteenth century is not established.

Lejeune argued that the lack of alphabetic letters to represent the labiovelars demonstrates that these sounds had disappeared before the alphabet’s establishment, which he, following conventional wisdom, took to be in the eighth century BCE.⁷¹ Today, however, transmission of the alphabet from the Levant to Greece is dated either to the eleventh century or, as I claim, to between 1800 and 1400 BCE.⁷² Accepting these dates would indicate that labiovelars had disappeared by the eleventh century or the middle of the Second Millennium. The situation is further complicated—in my disfavor—because I maintain that the letter *phi* (ϕ) originated from a Semitic *qup* (ϕ) and was used to represent labiovelars before their breakdown.⁷³ Nevertheless, neither Hesiod nor Homer show a trace of the labiovelars. These poets not only lived in the tenth and ninth centuries BCE, but—if I am right on the introduction of the alphabet—were also following spelling conventions that went back to the Bronze Age. Thus, their dialects had lacked labiovelars for some considerable time.

Jasanoff and Nussbaum still claim “that there is no empirical support for his [my] assertion that the PIE labiovelars had already broken down in Linear B.” They dismiss my arguments simply on the grounds that “not a single instance is known in which the labiovelar signs are used to write a demonstrably old labial, or in which labial signs are used to write a demonstrably old labiovelar.” I have never questioned the fact that no labials with demonstrable Indo-European etymologies have been writ-

ten with labiovelars. Jasanoff and Nussbaum, however, are being disingenuous here.⁷⁴ As stated above, examples exist of labiovelars before *u* and *y* having been delabialized to become a velar *k*.⁷⁵ Jasanoff and Nussbaum also relegate to a footnote an alternation *ke/pe*, which they explain in the orthodox way as a develarization resulting from two labiovelars being in one term.⁷⁶

To repeat my argument, the labiovelars could have broken down in speech while still being preserved in writing. If this happened, the sign *qa* would have been an alternative to *pa* during the fifteenth and fourteenth centuries BCE and the Egyptian title *pasiyara* could have been pronounced **pasireu* in the Aegean but written **qasireu*. It is quite frequent, if not normal, in languages like Japanese or Hebrew for the less common sign—or sign system—to be used to represent a foreign loan word.⁷⁷ All in all, I do not accept that the conventionally sanctioned speculation that the labiovelars were intact in the fourteenth and thirteenth centuries BCE is sufficient to dismiss the plausible etymologies. Later chapters will present etymologies of loan words and place names that become possible when one accepts the labialization of *qa* > *pa* by this time. A example of this can be found in the river name Qamisijo, which Chadwick reasonably linked to the Pamisos river in Messenia. This derivation has a plausible etymology from the frequent Egyptian toponyme and toponomic element P3 mw, “the water,” referring to rivers and tributaries of the Nile.⁷⁸

The problem of the final *-eu(s)* in *qasireu* / *basileu*s can be solved relatively easily. The origin of the suffix *-eus* was discussed in Chapter 6.⁷⁹ The suffix has been reconstructed specifically on the word *sr* “official.” The Egyptologists Adolf Erman and Elmar Edel see the full reading of it as *sirw* or *sriw*.⁸⁰ Thus, the final *-sileus* could come directly from *sirw* or simply as *sil* and the Greek suffix *eus*.⁸¹ The case for deriving *qasireu* / *basileus* from *pasiyara* + *w* is particularly attractive because of its semantic excellence and because all other attempts to find the source have failed spectacularly. After listing some speculation Frisk wrote, “so βασιλεύς must still always be considered, at least in detail, as an unclear foreign word.” As Chantraine put it, “It is useless to look for an etymology of βασιλεύς.”

p(e)siur (Coptic) “the eunuch” **ψῑλός** (H) “bald, hairless, smooth” **Ψίλαξ** (2CE) an epithet of Dionysos. Where *basileús* went up in the world from “high official” to “king,” in Egypt *sr* Coptic *siur* went down to become a more general word for eunuch. As such, it was again borrowed

into Greek and again with the definite article found in Coptic texts as either *pesiur* or *psiur*. In this last form it was introduced into Greek as *ψῖλος* “bald, hairless, smooth,” the characteristics of a eunuch. Chantraine and his pupil Perpillou associate it with *ψῖτω* “to nourish or feed a baby,” for which they have no etymology. There are also other related forms, *ψεδνός* “sparse or rare of hair” which Chantraine plausibly links to *ψῖλος*; the *ψίλινος στέφανος* was a crown of twigs for young naked boys in Sparta. Finally, there is *Psílax*, an epithet of Dionysos, which would fit the bisexuality associated with Dionysos, at least after the fourth century BCE.⁸²

***p3 sgnn** “the unguent,” Coptic *sočen* (S) *sojen* (B) *sācne* (A) **ψάγδᾱν** (5) “unguent.” This etymology was first set out by Paul Ernst Jablonsky in the early nineteenth century.⁸³ It has been universally accepted ever since.

***p3 sgr** “the silence” **ψέγος** (5 CE) “tomb.” Neither Frisk nor Chantraine can explain this word. **Sgr** or **Sgrh** “silence,” as a verb or noun, appears in the Greek **σίγα**, **σιγάω** (H) “silence” Frisk and Chantraine see the etymology of this word as “obscure.”⁸⁴

***p3 sts** “the prop, support” *sts* as a verb “raise up” **βαστάζω** (H) “to prop, raise up, exalt, praise.” Frisk states that this word is “not securely explained.” Chantraine believes that this and the Latin *bastum* and *basterna* from which the French and English “baton” derives, both come from a third Mediterranean language.

***p3 šw(y)t** “the shade, the soul” **šw(y)t**, “shady, fresh” and **Šw** “air” **ψῦχή** (H) “breath, vital force, individuality, soul” **ψῦχω** (H) “breathe” **ψῦχρός** (H) **ψῦχω** (3) “cold, fresh.” It is a widespread paradox of language that the same words often describe both sun and shade. This is certainly true of the Egyptian *šw*, which referred to sunlight. The related *šwt*, however, meant “shade” and the “cold emptiness of shadows.” In this last sense, it has a Semitic cognate, the Canaanite $\sqrt{\text{sw}}$ “emptiness, vanity” attested in the Hebrew *šāwəṣ*. As “air” *šw* is, of course, the god *Šw*, referred to in Chapter 8 as the etymon for *Kháos* in a much earlier loan.⁸⁵ Here, however, we are concerned with *šwt* “shadow” as an aspect or separable part of the human personality or “soul” comparable to the *b3* or the *ba*.⁸⁶

The Egyptian *šwt* with *p3* may well be the origin of the Greek *psýkhē* and related forms. The semantic fit between the two clusters of cold, shadow and soul is excellent. On the other hand, there are serious phonetic difficulties. In the first place, *šwt* as a feminine noun would take the feminine article *t3* not *p3*. As mentioned above, however, Late Egyptian had a general tendency for feminine singular, dual and plural words to be treated as masculine singular.⁸⁷ In particular, the Middle Egyptian “neuter” abstracts, like *ḏwt* “evil” had been grammatically feminine and became masculine. Possibly *šw(y)t* could have been treated in the same way in common speech, although *šwt* as a “shade” of Ra is attested with the article *t3*. A rendition of /Šw/ as *skhw in Greek is not improbable; even though no examples of the Egyptian /š/ as *skh* exist, there are examples from the Hebrew /š/.⁸⁸ The second phonetic problem is that the hypothetical loan requires the metathesis from *pskhw to *pswkh. Such a metathesis would involve splitting the phoneme and is certainly not one that I should normally accept.

Even worse problems, however, spring up on the Indo-European side. Some scholars accept the group *psýkhē* “breath, vital force, individuality, soul,” *psýkhē* “breathe,” *psýkhrós* (H), *psýkhō* “cool, refreshing” as a cluster. Onians even quotes the proverb “save your breath to cool your porridge.” On this he is supported by Frisk.⁸⁹ Chantraine, however, follows Emile Beneveniste in insisting that breath is not cold and wind is not necessarily so.⁹⁰ On the other hand, given the climate of north Africa and south-east Europe the idea of wind and shade being perceived as refreshing seems plausible.

Frisk writes, “the further history of ψύχω lies in prehistoric darkness.” Nevertheless, he goes on to “establish relations” with an Indo-European root *bhes “to blow.” How one reaches *psýkh-* from *bhes is not clear. Pokorny follows Schwyzler in seeing it as onomatopoeic.⁹¹ Chantraine simply states that the etymology of the whole cluster is “unknown.”

Neither the Egyptian nor the Indo-European etymologies for *psýkhē* are strong. The probability of the Egyptian, however, is increased by the context of plausible derivations for *phrēn* and *prapís*, given above, and that for *kēr*, discussed in Chapter 10.

***p3 qnbt** “the court, of magistrates, tribunal, judicial council etc.” Πνύξ, Πικνός (5) “the meeting place for the citizen juries of Athens.”⁹² The semantic fit is excellent and may be reinforced by the use of the □ (O38)

“corner” as the determinative of *qnb.t*. Gardiner suggested that it may be that the magistrates sat at a corner.⁹³ The Pnyx had an amphitheatrical shape against a high cliff. As to the gender of *qnb.t*, the preceding discussion of *p3 smyt/*psámathos* showed a tendency for feminine nouns to be treated as masculine in Late Egyptian.

Phonetically, the alternation p- pu- corresponds well with other Greek renderings of p3. Furthermore, the Late Egyptian fricative -b, was unstable. Thus, the only substantial phonetic and semantic difficulty remains the final -t. The lexicographers, failing to find an Indo-European etymology, propose a pre-Hellenic one possibly meaning “cliff.”

***p3 gnb.t** “people in Punt.” This form provides an etymon for Πύγμαῖοι.⁹⁴

***p3 ghs** “the gazelle” *gsi* “run,” *gs* “fast,” *gst* “speed,” Πήγασος (H). Gazelles, of course, are proverbial for speed. Frisk examines various hypotheses for an etymology, from Hesiod’s link to πηγός “springs” to πηγός “strong, powerful” and *pēgós* “white, black.” He concludes that the word is “pre-Greek.” Chantraine believes that *pēgaí* and *pēgós* are folk etymologies.⁹⁵

P3 t3 “the land,” the place-name Φθία on the Thessalian plain, land that Homer described as *eribolax* “deep soiled, fertile.”⁹⁶ Phthia appears to come from this attested Egyptian place name. T3 in Egyptian means earth as opposed to sky, land as opposed to water and plain as opposed to hilly country. P3 T3-n “the land of” was transcribed into Greek as Φθεν-.⁹⁷ P3 T3 would seem to be the etymon not merely for Phthia but also for the cluster of words πέδον (H) and πέδιον (H) “fertile plain, shore.” These are usually associated with *pous/podos* and the Indo-European, and possibly the Nostratic, root for “foot.”⁹⁸ The two roots undoubtedly affected each other, yet the semantic core of the cluster is much closer to p3 t3 “the land, plain,” which is attested as *pto* in Coptic.

p3 tw3 Coptic *petua* “the support, lintel, to hold up, sustain” πέτευρον (2) “perch, plank.” Chantraine has no explanation for the origin of this word.

***p3 tm** “completion, termination, annihilation” πότμος (H) “unhappy fate, death.” Conventionally, *potmos* is linked to the verb πίπτω “fall.”

Not only is the sense distant but it is also the only vocalization of the root as *pot.

***p3 th** “the beer jug” $\bar{\theta}$ (W 22) **πίθος**, *qeto* “large wine jar.” Chantraine dismisses an earlier etymology from an Indo-European root *bhidh because of the Linear B form. He now sees a labiovelar but for this to produce a labial he requires a “floating” from /e/ to /i/ and use of an Aeolic dialect. Chadwick, however, writes “neither the size of the vessel nor the form of the word, favours the identification, and it [*qeto*] may be one of the numerous loan words used for vessel names in Greek.”⁹⁹ Given the uncertainty of the root *bhidh, *píthos* itself could well fit this pattern.

***p3 t3w** Coptic *thēu* (B) (*p*)*teu* (S) “wind, breath” **ποθέω** (H) noun **πόθος** “long for, regret.” In Egyptian poetry *t3w*, the cooling north wind, is a powerful symbol of sweetness. Equally, however, in Egypt, Greece and many other cultures love and desire are likened to a fierce storm.¹⁰⁰ As the poet in the *Palatine Anthology* put it, “desire [πόθος], blowing heavily, maketh great storm.”¹⁰¹ In Arabic *hawān*, *hawāyā* “love, affection” comes from the same root as *hawā* “air, atmosphere, wind.”¹⁰² Since the Middle Kingdom, *t3w* could also be the “wind” of creation, and, at least by late times, it served the same function as Šw in separating earth from heaven.¹⁰³

A similar idea was also current among Canaanite speakers. In Genesis, the *rû^{ah} etōhîm*, translated as *pneûma theou* in the Septuagint, was the divine creative wind.¹⁰⁴ Philo of Byblos wrote in the first century CE but he claimed to have based his works both on Sanchuniathon, a priest who had allegedly lived before the Trojan War, and on the writings of Taaautos (Thoth). The existence of “writings of Thoth,” at least in the Egyptian Late Period (1000–300 BCE), has now been confirmed.¹⁰⁵ The discovery of parallels in Ugaritic myths has dispelled much of the skepticism around Philo’s claims of high antiquity.¹⁰⁶ Some of the cosmogony was distinctively Canaanite but Egyptian influence was strong on the Phoenician coast. Thus, it is inherently possible that Philo’s Pothós, “sacred wind or breath, desire” in Greek, was originally an Egyptian term. It played a central role not only in Philo’s Byblian cosmogony but also in a Sidonian one.¹⁰⁷ Apart from Byblos’ millennia of close association with Egypt, such a view is strengthened by Philo’s reference to the “writings of Thoth.”

The hypothesis that Pothós derived from *p3 t3w is also reinforced by a possible Egyptian etymology for Philo-Sanchuniathon’s proper name or technical term, Mōt. Mōt was the product of Póthos the “wind’s falling

in love with its own beginnings.” Martin West plausibly envisions this as a whirlwind. Philo described it: “Some say the ooze from a watery mixture. And from this came the whole seed of creation, the genesis of all things.”¹⁰⁸ West denies that there is a “plausible Semitic etymology for Mōt.”¹⁰⁹ L. R. Clapham in his thesis on Sanchuniaton, however, argued that Mōt came from an earlier form of the Hebrew *mw̄t*, which generally meant “shake” or “quake.” Some scholars, however, maintain it had the specific meaning of “quagmire.”¹¹⁰

An Egyptian word should also be taken into account. Commonly transcribed *mtwt*, it means “semen, seed, progeny” and, by the Ptolemaic period, the “fertilizing Nile flood.”¹¹¹ The semantic fit with Philo’s Mōt is perfect; the problem lies with the form *mtwt*. Commonly writing of hieroglyphs had graphic transpositions, particularly with signs representing birds.¹¹² In the various spellings of **mtwt* the quail chick  (w) was, in all but one case, placed elegantly in the middle.¹¹³ The possibility that it was pronounced **mwtt* is increased by Afroasiatic cognates. Takács lists Highland East Cushitic and North Omotic forms as *muta* “penis.”¹¹⁴ At a greater semantic remove, Orel and Stolbova construct a root **mut* “man,” found in Semitic and Chadic.¹¹⁵ In short, Philo’s Mōt may well have been influenced by an Egyptian **mwtt*, supporting in turn an Egyptian derivation of Pothós

Can Philo’s Phoenician Pothós be connected to the Greek *póthos*? Philo’s Pothós combined wind and desire, just as the Egyptian *t3w* did. The orthodox etymology for *pothēō*—maintained by Pokorny, Frisk and Chantraine—is from a root **g^uhedh-* (**k^wedh-*), resulting in the Old Irish *gui(i)diu* “pray.”¹¹⁶ There are clearly problems of meaning here. Chantraine is less sure on phonetic grounds; the semantically more attractive possible cognates with a root **ged-* “long for, miss” are in Baltic and Slav languages. Given the worldwide connection between wind and desire, however, the Egyptian etymology seems preferable.¹¹⁷

p3 dw Demotic *p3 tw*, Coptic *ptou* (S) *ptōu* (B) “the mountain,” a title used in many place-names. **Πτόων** (6) mountain in Boiotia.¹¹⁸ In Coptic the meaning was extended in two directions and was also used for “desert” and “monastery.” Mt. Ptōon had an oracular cult of Apollo Πτώϊος Ptōōios.¹¹⁹ Neither Frisk nor Chantraine provide entries for this. Pokorny links Ptōon and Ptōōios to a root **ptā-*, *ptō-*, and *ptā-* “cower, flee, fall.”

*Greek borrowings from Egyptian words
beginning with the feminine singular
definite article*

As mentioned at the beginning of this chapter, the masculine gender and definite article gained on the feminine during the Late Egyptian period. Therefore, many fewer plausible Greek etymologies can be drawn from this source. The following are a few examples of this type.

***t3 ĩrt** “the Uraeus” **τιῶρα** (5) “high Persian royal headdress.” Chantraine sees it as a loan possibly from Phrygian. Frisk writes, “Oriental foreign word of unknown origins.”

***t3 bint** “the evil” Coptic *boone* δῖβαν (5CE) Cretan δῖφας -αν (2CE) “snake.” Frequently, snakes are the symbols of evil in Egyptian—and other cultures.¹²⁰ Chantraine links these terms to δῖφάω “to investigate, explore.” On the grounds that “snakes slide into cracks”! **Δῖφάω** (H), for which neither Frisk nor Chantraine can provide an explanation, would seem more likely to come from the Egyptian *dbn* in the sense of “going around, encircling.”

t3 nmtt “stride, march, movement, action” Demotic *nmtt*, Coptic *tnomte* (S), *nomti* (B), *namte* (Akhminic, A), *namti* (Fayumic, F) “strength, power.” Vycíhl reconstructs a feminine participle **namitat* > *namtat* becoming an abstract noun. It was translated into Greek as ἰσχὺς *iskhús* or δύναμις. Both Černý and Vycíhl are puzzled by the shift in meaning from “stride” to “power.” The best explanation would seem to me to be from a march or procession as the entourage of authority and power. An analogy would be the Elizabethan use of “power” to refer to “a body of armed men.”

In Greek we find δύνᾱμαι (H) “be capable of” δύνᾱμις “might, force of war, authority” δύνατος (H) “powerful, capable.” Pokorný follows Ernout and Meillet in associating these words with a root **deu* or **dou* or **du* and with such cognates as the Sanskrit *duvas* “offer, honor,” the Old Latin *duenos* “good” and the Irish *den* “strong.” Chantraine disagrees; he and Frisk see a nasal infix indicating the present tense *du-n-*. He admits, however, that in this case it is difficult to explain the *-n-* in the noun *dýnamis*. He is “tempted” to see a connection with *ḏēn* “long, long time,” but he cannot find a “satisfactory link” between the two clusters. Both

Frisk and Chantraine maintain that the -s- in *δυνάστης* *dynástēs* (5) “lord,” is “nonetymological.” The Egyptian etymology for *dýnāmai* and *δύνατος* explains the alternation between *n* and *t* as alternative reductions of **t3 nmtt*. As mentioned above, a final -t in Egyptian is frequently rendered -is in Greek.

*A Greek borrowing from an Egyptian word
beginning with the common plural definite
article*

In this section I provide only one example; ***n3 n(y) nfr(w)t** “the beautiful young women” and **νύμφαι** (H) “nymphs.” In Chapter 11, I shall consider the Egyptian origins of both the names and the cults of the Muses who are rightly often confused with nymphs, and who share many characteristics. Here I shall simply consider the name. Paul Kretschmer and others tried to link *nymphē* to the Latin *nubo* “marry.”¹²¹ Frisk and Chantraine, however, are not satisfied with this and see the etymology as “obscure.”

I maintain that *nymphē* should be derived from the Egyptian *n3 n(y) nfr(w)t* “the beautiful young women.” The Egyptian *nfr*, which Gardiner reconstructed as **nūf̣(r)*, meant “youth” as well as “beauty.”¹²² In fact, the Greek root *nymph-*, like the Egyptian *nfr*, could be used for young people of either sex.

In Greek, however, *nymph-* had a number of other meanings. For instance, *νυμφαία* was a Greek name for water lilies and lotuses, including a species called *nenuphar*. This term is derived from the Arabic *ninufar* that, in turn, appears to come from the Egyptian *n3 n(y) nfrt*. Aristotle used *nymphē* as a term for “young bee or wasp in the pupa stage,” a scientific usage that persists today. In these species the form of the “pupa”—or penultimate stage of metamorphosis—resembles that of the adult and could, in fact, be called an “adolescent.” This is remarkable in view of the bee or wasplike appearances of the young genii found in Minoan and Mycenaean art. The association survived iconographically into the Archaic period. An Archaic metal plaque from Rhodes has figures that are half-nymph (in the sense of sylphlike creature) and half-bee.¹²³ These and the Latin borrowings *lympa* and possibly *limpidus* will be discussed further in Chapter 11.

THE EGYPTIAN WORD *pr* “HOUSE,
TEMPLE, PALACE”

An extraordinary array of words in many other languages resemble the Egyptian *pr* in both form and meaning. Bomhard reconstructs a Nostratic root *p^[h]al / *p^[h]əl “settlement, settled place.” He finds it in the PIE *p^[h]l̥H as well as in Uralic, Altaic and Dravidian. Interestingly, however, he does not include Afroasiatic or the Egyptian *pr* because it fails to live up to his strict phonetic standards of cognicity.¹²⁴ Orel and Stolbova also fail to construct an Afroasiatic root *pVr. Alexander Militarev and other Russian scholars have proposed a number of Berber cognates; Takács is unenthusiastic about these. Their case is strengthened somewhat by the Latin word *mapālia* “a type of hut,” which the Roman author Sallust described as a Numidian word.¹²⁵ The prefix *m-* often expresses locality.

Théophile Obenga, a student of Cheikh Anta Diop, has proposed a number of Central Chadic terms *p-r* and also some Niger-Kordofanian words, such as the Wolof *per* “dressed fence around the house.”¹²⁶ The root *pel- “house” is also present in Bantu.¹²⁷ Even more puzzling are a number of ancient southwest Asian parallels, such as two Anatolian roots *pir and *parn. Mount Parnassos is thought to be the one solid Anatolian place-name in Greece and for that reason is frequently cited by orthodox scholars.¹²⁸ Similar words occur in Hurrian and Urartian. Takács states, “if there was a connection it must have been a cultural *wanderwort*, although it would be difficult to reconstruct the ways of borrowing.”¹²⁹ It would seem to me that *par(n) fits the pattern of very early borrowings between Afroasiatic and PIH discussed in Chapter 4.¹³⁰

In 1927 Alan Gardiner wrote, “[𐤀] might stand, not only for *pāru*, but also for *pēr*, *āpr*, *ep̄r*, *ep̄ra*, and so forth. . . . pronounced *pār* (from *pāru*) in isolation, [it] may well have represented **pēr* when followed by a genitive and **prā* (yyu) in the plural.”¹³¹ In 1963 Donald Redford envisioned two different reconstructions: *pārēy* from the Coptic *-pōr* and *pērēy* from the Coptic *-pe*.¹³² In more recent work, Antonio Loprieno reconstructs *pr* as *pāruw*.¹³³

Greek borrowings from pr

pr “house, household estate, palace” **βᾱρίς** *bāris* (2) “domain, fortified great house.” Frisk and Chantraine suggest that this could derive from Illyrian and link it to **βαυρία** a word for “house” in the Messapian

language of Apulia, which was linked to the Illyrian languages on the other side of the Adriatic.¹³⁴ If such is the case, it would belong to the family of words described above. The semantics seem closer to that of the Egyptian *pr*. The difficulty with the Egyptian etymology, however, is that the -ā- indicates a borrowing before the shift $\tilde{a} > \tilde{o}$ around 1200 BCE. Chantraine plausibly maintains that this *bâris* is unrelated to another meaning “flat boat,” the Egyptian etymology of which from the Demotic *br* is unchallenged.

pr or **pr** ʹ3 “great house, palace” Πύλος *puro*, name of the palace at “Pylos.” “House, palace” would be a very suitable name for two place-names mentioned in the Linear B texts. The phonetics are more problematic because the texts date to the thirteenth century and, according to the experts, before 1200 BCE the vocalization would have been *pār—rather than the later *pōr—which would provide the better correspondence for *puro*. Nevertheless, I do not think it worth abandoning this Egyptian etymology that has no Indo-European competitor. It is also worth noting that the name Νέστωρ Nestor, ruler of the Messenian Pylos has a plausible Egyptian etymology in either Nst Hr “royal throne” or Nst wr “great throne,” both of which titles are attested.¹³⁵ That the word referred to a title rather than an individual would explain Nestor’s longevity, which so amazed Homer.

pr, πύλη (H) “city or palace gate, gatehouse.” Perhaps there is confusion here with the verb *pri* Coptic qualitative *pori* (S) *phori* (B) and the nouns *prw* Coptic *paure* and *pri* “going out.” Frisk contrasts πύλος with the Indo-European θύρα “door” and says that it has no etymology. Chantraine agrees.

pr, φύλαξ (H) “guard, sentinel.” The semantic parallels are obvious. As Chantraine points out the final -ak, simply marks an agent. He specifically denies that this word can be related to πύλη. Nevertheless, not only does alternation in general suggest a loan, but the difference between the Lower Egyptian Boharic aspirated stops and the Upper Egyptian Sahidic plain ones could explain this particular case.¹³⁶

pr, φύλον (H) φύλη (5) “tribe, constituted by relationship or habitation.” Masson cites Chantraine as deriving this word from two branches of the Indo-European root *bheu- / *bheue “grow, swell, live.” He links it

to the -bhu in *tribhu “tribe.” Pr “house, palace” can also mean the inhabitants of these buildings, as a family or administration. In many ancient cultures, “house” can mean “dynasty or people”: *byt* in Semitic or *oikos* in Greek and *domus* in Latin. Regarding the Egyptian etymology, it is also interesting to note that in Ptolemaic times $\phi\upsilon\lambda\acute{\eta}$ was used as a term for a subdivision of priests at each Egyptian temple.¹³⁷

*Greek borrowings from Egyptian words with
pr- prefix*

Naturally reduced forms of *pr* were used as prefixes. In late times, *pr-* as the prefix to a place-name was frequently treated in the same way as *pʒ*. Redford found examples in Coptic, Akkadian, Hebrew and Greek transliterations of P-, Pi-, Po and Pa as well as B-, Bo- and Bou-. Alongside these, however, he found some in which the *r* is still present: Phr, Per-, Pher- and Bar-. In addition to these are the transliterations of *pr ʕ3* “the great house, Par’o’ah” in Hebrew, $\phi\alpha\rho\alpha\acute{\omega}$ in Greek and *prro* and *puro* in Coptic. Redford explains those with -*r*, either as being old, before the loss of the -*r*, or as the result of a conscious archaism powerful during the Twenty-sixth or Saite Dynasty, 664–525 BCE. This may be a case of misplaced precision, but it is clear that there were alternations between PV- and Pr/V.¹³⁸

*Greek borrowings from Egyptian forms and
names beginning with pr*

Pr 3b sanctuary of the reliquary, 3b $\frac{30}{18}$ (R17) $\Pi\rho\acute{\iota}\alpha\pi\omicron\varsigma$ (5) **Pr 3b** was a phallic fetish of Osiris that also served as the symbol for the nome of Abydos and was an alternative name for that city.¹³⁹ Abydos was the cult center of Osiris, among whose ceremonies were some in which phalloi played an important part. Herodotos described the festivals of Dionysus whom he repeatedly identified with Osiris:

... the Egyptian method of celebrating the festival of Dionysus is very much the same as the Greek, except that the Egyptians have no choric dance. Instead of the phallus they have puppets, about eighteen inches high: the genitals of these figures are made almost as big as the rest of their bodies, and they are pulled up and down by strings as the women carry them around the villages.¹⁴⁰

Πρίᾱπος “phallic god, or phal(l)os” was traditionally supposed to derive from the phallic rites of the city of Πρίᾱπος on the northwest coast of Anatolia. Frisk is inclined to accept this derivation but Chantraine is more skeptical. Neither proposes an Indo-European etymology. The idea of Egyptian influences on toponyms in northwestern Anatolia is made less absurd by the place-name Abydos on the Dardenelles, sixty miles to the west of Πρίᾱπος. The coincidence of the paired names of the Egyptian city is made still more remarkable by the presence of satyrs and the satrai linked to the cult of Dionysos. These are connected with phallic or priapic cults in Thrace on the European side of the straits. They will be discussed in Chapter 10.¹⁴¹

pr ʿ3 “big house, palace, pharaoh,” **Φαράω/Φαρώω** and **Φάρος** Pháros (H), island off the western Delta, later the site of the famous Lighthouse of Alexandria.

Pr ʿnh. Nineteenth-century German scholars maintained that the **Βραγχιδαι** oracular priests at the temple of Apollo at Didyma near Miletus, were related to the Sanskrit *Brahman*. In view of this cult’s mythological and archaeological contacts with Egypt, it would seem more plausible to derive it from the toponym **Pr ʿnh**.¹⁴²

pr ʿnh. This controversial term will be more fully discussed in Chapter 10. One sense is undoubtedly “temple scriptorium,” **πίναξ-κος** (H) “writing tablet, flat.” Frisk and Chantraine derive it from a root found also in the Old Church Slavonic *pini* “tree stump” and the Sanskrit *pinaka* “baton, cane.” Both are concerned by the semantic shift but see an analogy in the Latin *caudex* “tree trunk, wooden table, book.” Both etymologies or a combination of the two are possible.

Pr W3dyt temple-city of W3dyt, Coptic Puto (B)/Putōu/Buto (B) Greek Βουτώ, Βούτος city in the northwestern Delta, **Αφροδίτη** Aphrodite (H). Hesiod set out the traditional etymology for the name Aphrodite in his *Theogony*. He writes that, after Krónos had harvested the genitals of his father Uranos and thrown them into the sea, they had, after a long time, formed λευκὸς ἄφρὸς “white foam” (semen?) from which the body of Aphrodite was created.¹⁴³ This image has haunted the European imagination ever since, most notably in Botticelli’s famous painting *The Birth of Venus*. According to Hesiod, Aphrodite emerged either near the island

of Cythera (Kythēra) between the Peloponnese and Crete or several hundred miles to the east, near the shore of Cyprus.¹⁴⁴ Her most frequent bynames were Kytherian and Paphian from her cult centers on Kythera and at Paphos on the western coast of Cyprus.

Modern lexicographers do not accept the derivation from *aphrós*. Some have sought an Indo-European etymology, but Frisk and Chantraine deny this both on the grounds of specific phonetic and semantic difficulties and because of their conviction that Aphrodite came from the "Orient." Equally, however, they are not persuaded by the attempt to derive it from the name of Aphrodite's Semitic counterpart, Astarte, because of the phonetic absurdity. They are resigned to declaring the etymology "unknown," or "unexplained."

Frisk and Chantraine, however, do not consider an Egyptian etymology, which is, in fact, far stronger. The phonetic correspondence between Pr W3ḏyt and Αφροδίτη is good. It explains the final -dite, which the traditional etymology cannot do. While Gardiner doubts that the  (M13) in W3ḏyt was pronounced w3, he is obliged to admit that it is spelled in this way in a Pyramid Text.¹⁴⁵ There is little difficulty in proposing a prothetic >aleph before the double consonant, *iPr W3ḏyt. Indeed, Gardiner mentioned the possible reading of *pr* as **apr* in the passage quoted near the beginning of this section. The name Aphrodite was clearly introduced after the /3/ had lost its consonantal value. A problem with the -r- arises from Hesiod and Homer, who make it too early for the sixth-century revival of the pronunciation as /r/ envisaged by Redford. Equally, their information must have been before the final -yt was dropped.¹⁴⁶ At the other end, no reference to Aphrodite has been found in Linear B texts, so far. We know, however, that W3ḏyt was worshipped in the Aegean in the Second Millennium. Furthermore, as stated above, we cannot be sure that during the Saite Dynasty was the only time in which the /r/ written in *pr* was revived.

Semantically the case for deriving Aphrodite from Pr W3ḏyt is very strong indeed. W3ḏyt was a goddess of fertility, associated with the new growth after the flood, just as Aphrodite was with spring and youthful love. The name of W3ḏyt was written with a lotus and a snake,  (m14), as snakes emerged in that season. In Egypt divinities were often identified with their dwellings, temples or cities. Other examples of this will be given below. In this case, it is known that Pr W3ḏyt was sometimes used as the name of the goddess herself. It was recorded in a list as a form of

Hathor and Aphrodite was the Greek counterpart of Hathor. The tenth nome of Upper Egypt was dedicated to W3dyt and Gardiner identified the leading town on the west bank of that nome, W3dyt or Pr W3dyt, with the Greek toponym Αφροδΐτης πόλις.¹⁴⁷

Objects found at Knossos suggest that W3dyt was worshipped in the Aegean in the Second Millennium. First was a class of figurines of beautiful women holding or enveloped by snakes.¹⁴⁸ The best known of these is the glazed faience figurine of a bare-breasted, wasp-waisted woman in a flounced skirt, holding a snake in her one remaining hand. For reasons of symmetry there must originally have been two.¹⁴⁹ Not only are beauty and snakes represented but associated model votive robes are decorated with, as Evans puts it, "sacred saffron flowers in which the influence of Egyptian lotus clumps is clearly traceable."¹⁵⁰ Although the style is distinctively Minoan, the multiple symbolism of sensuous beauty and snakes and lotus, associated her in the mind of the excavator, with "Wazet" W3dyt and Hathor.¹⁵¹

In this context it is interesting, but not necessarily indicative, that an incomplete Egyptian statuette found at Knossos is of a personage with the name Wsr Wdyt.¹⁵² The figure seems to date to the Sixth Dynasty at the end of the Old Kingdom or the Middle Kingdom. The date of the context in which it was found is hotly contested. Evans put it at Middle Minoan II (MMII, from the end of the nineteenth century BCE), making it contemporaneous to the end of the Middle Kingdom. Revisionist scholars, however, now put the context of discovery at the MMIII at the earliest, that is anything up to eight hundred years after it was made.¹⁵³ There is no necessity for Wsr Wdyt ever to have been in Crete. His statuette could have been imported at any time in the interim. On the other hand, the inscription is engraved with unusual clumsiness, which suggests that it was made in Crete, by someone who knew, or knew of, Wsr Wdyt. Thus, the likelihood is that it was kept on Crete for some time, perhaps centuries, before its final deposition. This increases the chances that the figurine was treasured because it was part of the cult of Wdyt, which existed in Crete through the figurines.

Archaeology has revealed that the cult, if not the name of Aphrodite, was known in Late Bronze Age Palaio-Paphos, the cult center of Aphrodite and her Phoenician counterpart Astarte, on Cyprus.¹⁵⁴ Interestingly, however, Pausanias maintained that, before the Greek foundation of the Paphian cult on the extreme west of the island, there was already one at the center of the island at Golgoi.¹⁵⁵ The name Golgoi

has a clear Egyptian etymology in the common Egyptian toponym, Grg “foundation, colony.” No doubt an important cult of the goddess was established there.¹⁵⁶ Aphrodite was known as either Paphia or Golgia throughout Cyprus. At the then-Phoenician city of Idalion, near Golgoi, coins were struck in the early fifth century. They showed a seated sphinx and a lotus flower, “perhaps symbols of Aphrodite,” as the modern scholar Carl O. Bennet has noted.¹⁵⁷ Symbols of Hathor associated with Aphrodite from the classical period have been found throughout the island.¹⁵⁸

To conclude, it would seem either that the absence of the name Aphrodite from the Linear B texts is accidental or that the Cretan Wdyt was known by another name, possibly Wanassa “queen,” by which she was known in the conservative Cypriot syllabary.¹⁵⁹ Nevertheless, the firm establishment of the goddess in Hesiod’s *Theogony* and the Homeric epics indicate strongly that she was already known as Aphrodite by the end of the Second Millennium.

***Pr W3dyt** as βεῦδος (6). The root w3d on its own meant “fresh, green” and one specialized word w3dt was “green linen.”¹⁶⁰ Pr W3dyt was not only the name of the city of Butō but, as shown above, it was also the name of the goddess herself. Thus the combination of green linen, the rich city of Butō and the goddess of beauty make Pr W3dyt a convincing etymon for *beûdos* “rich female garment.” Frisk states that it is an unexplained foreign word. Chantraine agrees but writes that it has perhaps an Asiatic origin. The Egyptian one seem preferable.

Pr B3stt Coptic Pubasti/ Bubasti, Greek Βούβαστις “City of the Goddess B3stt,” name of the goddess herself. Βούβαστις *boúbastis* (6CE) also means “groin, pubis.” Chantraine links this to Βουβών “groin, pubis.” He and Frisk derive *boubôn* from an Indo-European root also found in the Sanskrit, *gavīrñ* “groin, lower stomach.” Chantraine, however, admits that the structure is “a little different.” Another possible source for *boubôn* is from the Egyptian, *b3b3w* Coptic *bēb* < *bū(r)bū(r) “hole, cranny.” Takács cannot decide among the many plausible Afroasiatic etymologies for this word.¹⁶¹ While there is little doubt that *boúbastis* as “pubis” may have been influenced by *boubôn*, it is equally likely to have been derived from the city name and, in particular, from the festival of B3stt, which Herodotos describes as the best attended in Egypt: “they come in barges men and women together, a great number in each boat. . .

whenever they pass a town on the riverbank, they bring the barge close in-shore some of the women continuing to act as I have said, while others shout abuse at the women of the place, or start dancing or stand up and hitch up their skirts.”¹⁶² The Greek ἀνασύρονται ἀνιστάμεναι has a stronger implication of exposure.

The Hebrew form of the name was Pī beset, which has resonances with *bōšet* “shame,” particularly of nakedness and exposure of the pudenda.¹⁶³

The lexicographers Ernout and Meillet have “no sure etymology” for the Latin *pūbēs* “the hair that characterizes puberty.” They attempt to link it to the Sanskrit *pumán* “man” but are unhappy with the connection. They absolutely deny any association with Latin *puer* “boy.” Probably because of its late attestation, they do not consider the Greek βούβαστις. Chantraine suggests, however, that Bubastis may be “ancient” and, unlike *pūbēs*, it has a plausible etymology. Thus, it is probable the terms “pubis” and “puberty” etc. come from the orgiastic celebrations at Pr B3stt in the Nile Delta.

Pr n ḥpr “house of the Scarab or of the god Ḥprī” Demotic city name: **Παρνόπιον**, biname of Apollo on the Athenian Acropolis. This word is commonly derived from **πάρνοψ**, **πόρνοψ**, or **κόρνοψ** “grasshopper or locust.” The god being portrayed as a protector from locusts.¹⁶⁴ There may be some confusion here, but “locust” is more likely to be a folk etymology. The derivation of the name Apollo from the Egyptian Ḥprī, god of the morning sun, will be discussed in Chapter 19, below.

Pr Rwtj “house of the double lion” The idea of the Rwtj as creator gods Šw and Tfnt goes back to the *Pyramid Texts* of the Late Old Kingdom or beyond.¹⁶⁵ Later in the *Book of Coming Out By Day*, the Double Lion “is in his cavern [Pr Rwtj], warden of the House of the Royal Wig Cover.”¹⁶⁶ The Double Lion is clearly associated with the underworld. **Πλοῦτος** Pluto (H) “treasures of earth” and personified by Hesiod as a son of Demeter.¹⁶⁷ Frisk and Chantraine link it to *plé(w)ō* “float [hence?] spread, flood.” While possible phonetically, from the semantic point of view this is a very strange etymology. A related personification, **Πλούτων**, was seen as the beneficent underworld as opposed to the punishing: **Αἰδης**. Hades received its/his name from **ḥdi** as an intransitive verb “to be destroyed” and as a noun “damage, destruction.” The Coptic form was *hōj* “oppress, torture.” The name may also have been influenced by the Syrian thunder god Ḥadad. Frisk sets out a number of hypotheses to

explain *Haidēs*. Neither he nor Chantraine finds any of these worthwhile.

Another subterranean deity was **Δάειρα**. The name appears to come from **dwꜣt** “netherworld.” Chantraine tentatively derives it from the Vedic *dasrā* “miracle maker.”

Pr Tm Coptic *Pithōm* (S) *Pethōm* (B) the Wadi Tûmilat, the fertile valley linking the eastern Delta and the pools now known as the Bitter Lakes around Ismailia on the present Suez Canal. Intermittently under powerful pharaohs, at least as early as the Middle Kingdom, the wadi was excavated to form a canal linking the Nile—through the lakes—to the Red Sea. The key city on the canal was Pr iTm (temple of Atum) which is generally accepted as the city known in Exodus as Pītōm, Πε(ι)θω or Πιθωμ in the Septuagint.¹⁶⁸ Herodotos named it Πατοῦμος Αραβίας.¹⁶⁹ It was later known simply as Patoumos. In Latin it was known as Patoumus or Pithona Civitas.¹⁷⁰

Ποταμός (H) “water course, river [later?] canal.” The conventional etymology is to link it to the πίπτω, ἔπετον “fall.”¹⁷¹ Chantraine is not completely satisfied with this derivation and still less with one from πετάννυμι “spread,” suggested by earlier scholars.” (See the bibliography in Frisk.)

The phonetic difficulty with a derivation of *potamos* from Pr Tm is merely the vocalic metathesis a-o>o-a, Patoumos>*potamos*. This is not serious in itself and could also be explained by loans before and after the Canaanite shift.

Two semantic problems arise with a derivation *potamos* from Pr Tm. First, nothing attests that the canal was named after the city, although many examples of this practice exist around the world: Lake Geneva, Yángzi Jiāng (Yangtse) after the region and city Yangzhou, are only two of them. Furthermore, the modern name Wadi Tûmilat provides an indication that the wadi or canal itself was known as Pr iTm. The second problem, which is more serious, is the lack of an analogy to the pattern of a general geographical term deriving from a specific one, although mountains are sometimes referred to as “Everests” or waterfalls as “Niagaras.”

Despite these difficulties the etymology remains plausible, especially in the absence of a serious Indo-European competitor.

Pr thn “house of brilliance,” temple in Sais; **Παρθένων** “temple of

Athena,” epithet of goddesses and παρθένος, “young women in the bloom of youth.” This identification will be a central topic in Chapter 22.

R- “ENTRY” OR LOCAL PREFIX

The vocalization of the Egyptian localizing prefix r(a)- as la- is noted here in the cases of Larissa and *laura*. Unstressed, the prefix became le- lə- or l- in Coptic. Hence, the Greek borrowings became le- or li-.¹⁷²

r-3ht “entry to the fertile land,” Avaris, **Λαρίς(σ)α**, Larissa “place-name for cities dominating rich lands.”¹⁷³ Another possible derivation from r-3ht is **Ῥαριον**, the fertile plain near Eleusis that is sacred to Demeter.¹⁷⁴

r-ib “stomach” **λαπαρός** (H) “softness, soft flanks of the stomach.” Frisk and Chantraine see structural parallels and links to other adjectives but provide no etymology for **λαπαρός** itself.

***r-isq** “place or room for lingering” **λέσχη** (H) “men’s house.”¹⁷⁵

r-w3t “way, lane” Coptic *raoē* (B) *rauē* (S) “neighborhood” **λαύρα** (H) “narrow passage, lane, tunnel.” Frisk states that this word is usually associated with **λῶας** “stone,” but there are doubts. Chantraine denies this etymology altogether. The loan from Egyptian must be early because of the value of the /3/.

r-pdtyw “foreigners (people of the bow, *pdt*; Coptic *pīte*)” *pdt*, *pdttyw* “troop,” transcribed in Babylonian as *pitatiū*.¹⁷⁶ Late Egyptian *R-pdt* “conflict?” **Λαπίθαι** (H) Lapiths, “Enemies and stout warriors,” according to Homer.¹⁷⁷

***r-mny** “place of mooring” **λιμήν** (6) “harbor, port.” Chantraine associates *limén* with **λίμνη** (H) “lake pond” and **λειμών** (H) “water meadow.” He is uncertain about the etymology of the group but considers connecting it to the Vedic *nimná* “wet hole” or the Latin *limus* “mud” and the Teutonic *slim* “slime.” If we accept the association, the Egyptian etymology is preferable. Vycichl pointed out that the two apparently incongruous meanings of **mny** “to pasture livestock, to moor a ship” are linked because in Egypt, as in many other places, both involved tying to a (fixed *mn*) post (*mnit*).¹⁷⁸

In Late Egyptian a term *rmnyt* “domain, domain lands” is written with the determinative 𓂏 (N36) “canal.”

***r-qn(i)** “mat, basket” **λίκνον** (4) “winnowing basket,” sacred basket for offerings of first fruits to Demeter and Dionysos. Chantraine relates this word to **λίκμᾶω** “to winnow” and links it to Gaulish, *níthio* and Breton *níza* “winnow.” This would seem to derive from the Egyptian **iri qm³* “make, winnow.”

r-dr̥f “to its end” Late Egyptian, *r-dr̥* “all, entire,” Nb-r-dr̥ “royal title.” **λάθυρος** “purge” and surname of Ptolemy VIII.¹⁷⁹

r-dr̥ See Chapter 10, below.¹⁸⁰

(R)D̥IT, “CAUSAL PREFIX”

The Egyptian verb *rdi* “to give,” may, as Takács writes, be the result of “contamination” of various Afroasiatic roots found in Semitic and East Cushitic.¹⁸¹ I have been able to discover only one Greek derivation from the Egyptian verb in this full form. The name Rhadamanthys is from an unattested, but completely regular, Egyptian name **Rdi Mntw*, “*Mntw* gives,” “whom *Mntw* has given.” The intricate relations of Rhadamanthys and his brother Minos with Egyptian and Cretan bull cults are set out in Volume 2.¹⁸²

As do many Nostratic language families, Afroasiatic has an /s/ causative, usually prefixed.¹⁸³ Egyptian also has this form. Very early, however, the prefix ceased to be “productive,” that is to say, added to new verbs. It was replaced in this function by *rdi* added to the prospective form of the verb. This prefix became extremely common in Middle Egyptian.¹⁸⁴ At a very early stage, the initial *r-* was dropped, giving *d i* or *dīt*. Vycichl set out a detailed chart showing the renditions of *d i* in the various Coptic dialects. In all the normal form was *tī*. The prepronominal forms in Sahidic and Bohairic, however, were *taa* and *tēi*, respectively, and the qualitative forms were *to* and *toi* in those major dialects.¹⁸⁵ Many verbs of this kind were copied into Greek.

GREEK BORROWINGS FROM EGYPTIAN
VERBS BEGINNING WITH *dī*(*t*)-

***dit 3q** Demotic *dit 3q*, Coptic *tako* “to destroy, perish, lose,” **τήκω** (H) Doric **τῆκω** “melt, dissolve, be lost, waste away, be consumed.” Frisk and Chantraine derive it from an Indo-European root, **te*₂ / *t*₂ “soak” (which is not the chief meaning of *tēkō*). They see the -k and its analogies to the form in some Greek aorists but admit that it has not been found outside Greek.

dit ir(y) *tro* (S) *thro* (B) “cause to do” **δρᾶω** (H) “to do, accomplish,” particularly in the sense of “service rendered by a servant, responsibility.” Frisk and Chantraine see a connection with the Lithuanian *daraũ* *darýtĩ* and the Latvian *darīt* “to do,” although Chantraine is somewhat skeptical. Frisk argues the verbs “to do, make” are late abstractions so that there are often many varieties, as in Greek **πράττω**, **ποιέω**, and **ἔρδω**. I believe that he is mistaken and that in this case, as in many others, the Greek vocabulary, like the English, is enriched by drawing upon many sources: *érdō*, native Indo-European; *drāō* Egyptian; and *poieō*, from Semitic. *Poieō* will be discussed in Chapter 14, and the complications of *prattō* in Chapter 17.¹⁸⁶

dit ʿ3 “make great honor” Demotic *ty ʿ3*, Coptic *taiō*, **τιώ** “honor, esteem.” Chantraine is concerned with the radical *ti-*. He points out that Benveniste and others postulated an Indo-European root **k*^w*i* or **k*^w*ei* and saw a parallel in the Sanskrit *cāyati* “respect.”¹⁸⁷ Other scholars, including Frisk, see a connection with *tínō* “pay debt, or fine etc.” (See below). Chantraine writes that if one accepts this interpretation, the element *ti-* loses all meaning.

dit inw “cause to bring (*inw* / tribute)” Demotic *ty inw*, Coptic *innou* “send, send for, search for” **τινω** (H) usually **τίνω** “pay debt or fine, pay back.” Frisk and Chantraine see *tínō* as cognate to the Sanskrit present *cinute* from a labiovelar “observe, notice.” In this sense, as Chantraine put it, it could have “given birth in Greek to its use as ‘chastise, punish?’” They see the -n- in *tínō* as a present infix and the bases as **teis-* or **teit-*. These would indeed be cognate to the Sanskrit *cayati* “revenge punish.” I see no reason to deny that the -n- is an element of the root. The least unlikely explanation is that there has been a conflation of a native Indo-European form from **k*^w*i* / **k*^w*ei*-s / *t* to the Egyptian *dit inw* in the older sense of “to

cause to bring tribute.” I see the further complications having been caused by influence from another Egyptian verb **dīt dī* Demotic *ty tw* “make give,” Coptic *tto*.

***dīt mʒʿ** Demotic *hymʒʿ* Coptic *tmaiō* “render true, justify, be justified, praise” The Greek **τιμή**, *tīmē* Doric **τῆμα** and **τιμόω**, *tīmáo* (H) “honor”¹⁸⁸ (*mʒʿt* itself will be discussed in the next chapter). Jasanoff and Nussbaum object to this etymology on both semantic and formal grounds. Semantically, they claim that the meanings “truth” and “justification” have nothing to do with the Greek *tīmē*. According to them, “its meanings are ‘honor(s) accorded to gods and kings . . . reward, compensation’”¹⁸⁹ Against this argument is the fact that the Coptic *tmaiō* was used to translate the Greek *makariousi* “blessed” (honors from God), *tīmân* “to honor” and *timian poein* “to make honor.”

Jasanoff and Nussbaum also fail to consider the central and wide-ranging importance of the concept of *mʒʿt* in Egyptian culture. This word means not merely “truth” and “justice” but also the order of the universe. Offering or giving *mʒʿt*, *dī(t)* *mʒʿt* was a royal ritual with many functions. One was to establish and reaffirm the legitimacy of the pharaoh’s rule.¹⁹⁰ *Tīmē* has a meaning, found in Hesiod, of “a present or offering to the Gods.”¹⁹¹ Greek words related to *Tīmē* also overlap with *dī(t)* *mʒʿ*. *Tīmésis* has a meaning of “estimation, assessment” and *tímōrō* “avenge, punish,” which fits well with the basic sense of *dī(t)* *mʒʿ* “cause to become just.” The sense of “praise” fits well with *tīmē* as “honors.” All in all, even though both the Egyptian and Greek words are wide ranging, the semantic fits are remarkably good.

I quite agree with Jasanoff, and Nussbaum that *tīmēō* and *tīō* “I honor” are fundamentally related, but we differ regarding connections. They see both words as deriving from the hypothetical **kʷ* linked to a Sanskrit root *ci/cāy* “note, observe, respect,” mentioned above (although as Chantraine pointed out, the proposed relationship is rather more complicated and dubious). On the other hand, I see common derivation from the Middle Egyptian causative *dīt* or more precisely the Late Egyptian form recorded in the Demotic *ty*. The long /*ṯ*/ in *tīmē* and *tīō* and *tīnō* indicates that these words were taken into Greek before pretonic vowels were reduced to /*ə*/ in Coptic at the end of the Second Millennium BCE. This fits with evidence from the Greek side: the absence—so far—of these words from the Linear B tablets and their firm establishment in epic poetry. The Egyptian etymologies explain the links and differences

among *tīmē*, *tīō* and *tínō* and they are certainly semantically and phonetically superior, as well as more direct, to the uncertain and tangled hypothetical gossamer linking them to Sanskrit and PIE.

***dit nqr** “cause to sift” **τινάσσω** (H) (τινάξαι, τινάγμος) “to shake, winnow.” Both Frisk and Chantraine refer to August Fick’s “ingenious” derivation of **τινάξαι** from a hypothetical ***κινάξαι** coming from **κινέω** (7) “move” (transitive and intransitive), “trouble, overturn.”¹⁹² The phonetic shift is extraordinary and the semantic relationship is not that close. *Kinéō* itself requires some hypothetical maneuvering to explain in terms of the Indo-European root **kai-*: **k**- and -n- infix, although it is present in all tenses. Chantraine has difficulty in explaining the long /τ/. It would seem simpler to derive it from the Canaanite *qināh* “ardor, zeal, jealousy,” which is deeply rooted in Semitic.

CONCLUSION

While the prefixing of *(R)dit-* and *r-* has previously been obscure for non-Egyptologists, the firm adhesion of definite articles and the common prefix *Pr-* to the nouns and verbs they modify has been known to students of Coptic since the field was founded in Europe in the seventeenth century. With very few exceptions in place-names and such ideologically acceptable terms such as **πάν** “Nile fish” or ***p3 sgnn ψάγδαν** “the unguent,” these prefixes have not been considered possible etyma by lexicographers of Greek. This extraordinary lacuna can only be explained in terms of the politics of scholarship.¹⁹³

CHAPTER 10

MAJOR EGYPTIAN TERMS IN GREEK

Part 1

This chapter and Chapter 11 treat the ramifications in Greek of a number of terms central to Egyptian civilization. As such, they are precisely those that one should expect to have been exported. It is, therefore, not surprising to find that they do in fact provide many plausible origins for Greek words with no, or only very improbable, Indo-European etymologies.

1. NTR/kꜥ

The hieroglyphic for *ntr*  (R8) was a cloth wound round a pole, an emblem of divinity used broadly for gods, including deceased monarchs, and for the life force in general. Even more difficult to define is *kꜥ*  (D28) “embracing arms”: it is a spirit or one of the Egyptian souls, a manifestation, agent or *doppelganger* of a person or divinity. Interestingly, *ntr* and *kꜥ* may well have a common origin. The origin of the Egyptian /t/ from an earlier /kʸ/ and /ʒ/ as a liquid /r/ or /l/ were discussed in Chapter 8 above.¹ Thus one could hypothesize a form *en $\bar{k}$ era in which originally allophonic variants of /k/ and /kʸ/ became phonemically distinct and the palatalized variant lost its initial /n/. In fact, the hypothetical proto-form exists in reality as *ink̄era* and *enkerā* “soul, life” in the Central Cushitic languages of Bilen and Kwara. Franz Calice pointed this out in his posthumous work published in 1936. Werner Vycichl

dismissed their significance because “these languages resemble Egyptian so little.”² I do not believe the parallel can be dismissed so easily as it is clear that Cushitic and Chadic languages have preserved many very ancient Afroasiatic features. More recent scholars would do well to follow the great African linguist Karl Meinhof who wrote in 1915:

At the present time there is a tendency among philologists to consider some of the “Hamitic” languages of Africa as greatly worn-down Semitic languages. I cannot accept this view. Since the Hamitic languages possess living forms which appear in the Semitic as mere rudimentary survivals, I think we are justified in assuming the former to be more ancient.³

Vycichl was more tolerant when he considered Semitic languages. He drew attention to what he called the “astonishing” correspondence between what he reconstructs as the early Egyptian *naṯr* and the Ge’ez *nakir* “pilgrim, stranger, other” with an adjective *manker* “miraculous, amazing.”⁴ Apart from the last, the semantic parallels are far less impressive than the phonetic ones from Bilen and Kwara.

Ntr >” Avθoς, etc. In their critique of my work, Jasanoff and Nussbaum found my proposal that *ntr* was “given five different phonetic treatments in Greek” to be absurd and outrageous.⁵ Parallels from varying manifestations of Chinese loans into Japanese or Romance loans into English, however, make the number in itself unexceptionable. For instance, English has borrowed often and separately from two Vulgar Latin words: *camera* “arch, vault” and *cantare* “to sing.” From *camera* comes “chamber” through the French and the legal term *in camera* through Italian. From *camera obscura* (darkened room with a double lens as the only source of light) we derive the modern photographic apparatus called a “camera.” Even more phonetically distinct derivations come from *cantare*: whining “cant” from Northern French; “cantata” from the Italian; “chant” and, finally, “sea shanty,” said to be from the Modern French imperative *chantez*.⁶ In these cases we have a reasonably detailed knowledge of the development of Romance dialects and the periods of borrowings. If all we knew were the Latin *canere* “to sing” and *camera* “vault” and the English “chant,” “cant,” “cantata” “shanty,” and “chamber” and “camera,” we would merely have groups of words with vague semantic and phonetic resemblances without the precise regularities traditional Indo-

Europeanists require. Yet, they are all certain borrowings from Romance languages!⁷

For an east Asian parallel, see the character for “lark” or “pipit” pronounced *liu* in modern Chinese. It has eight different *on* (Chinese) readings in Japanese; *ryū ru*, *bō*, *hyū*, *mu*, *kyu*, *gu*, and *ryō*. Thus, unlike Jasanoff and Nussbaum, I have no difficulty in believing that the Egyptian *ntr*, which is more complicated phonetically than the prototype of *liu*, could have had “five distinct phonetic treatments.”

Therefore, we should look at the proposed etymologies from *ntr* individually. The most important proposed derivation, that of the Greek *ánthos* requires some explanation. The Indo-European etymology claimed for *ánthos* is from a hypothetical root *andh or *anedh “to stand out, sprout, bloom.” Pokorny derived this root from *ánthos* itself and such far-fetched forms as the Tocharian *ánt* “plain.”⁸ The only member of the cluster that has a possible semantic parallel with *ánthos* is the Sanskrit *ándhah* the magic “soma plant,” which was supposed to confer immortality. Frisk maintains that any connection between *ánthos* and *ándhah* is “unprovable” and Chantraine doubts it altogether.⁹

The case for a derivation of *ánthos* from the Egyptian *ntr* is much stronger. On the phonetic side, final *-r* was unstable even in Middle Egyptian.¹⁰ The *-r* in *ntr* vanished altogether in the Coptic *nute*. This vanishing does not necessitate an introduction after the first half of the Second Millennium as the final *-r* may have existed in Greek. The word cluster around *anthos* contains several forms with a final *-r*: *antharion* “pimple,” *antheros* “flowery,” *antherikos* “asphodel” and “awn or beard of wheat, or the ear itself.” **Ἀθήρ** (H) “pointed ear of wheat,” was a sacred symbol of Osiris in Egypt and of the Eleusinian Mysteries in Greece.¹¹ *Ntr* “divine” would be entirely appropriate, for this. Despite the fact that in most of these cases the *-r* could be morphological, a possibility remains that it is part of the root that has been dropped elsewhere. A prothetic *i-* can be seen in the Coptic plural forms *entēr*, (B) *ntēr* (S) “gods.”

In *Natural History* Pliny wrote that **ᾠθήρη** (2) a “flour casserole?” was “an Egyptian word.”¹² Chantraine writes that this derivation appears to be confirmed by the word’s attestation on a papyrus. He insists, however, that “this proves nothing about the etymology,” not that he can find one himself. While he denies any connection with *athēr*, he admits that popular etymology could have associated the two forms. The use of flour pastes in the rituals around the death and vegetable rebirth of Osiris makes Pliny’s claim very strong indeed.¹³

As for semantics, the nineteenth-century Egyptologist, Heinrich Brugsch maintained that *ntr* was “the operative power which created and produced things by periodical occurrence and gave them new life and restored them to the freshness of youth.”¹⁴ It would be good to report that Egyptologists have progressed in the definition of *ntr* since then, but the vagueness or multivalence of the term continues to baffle them. Many of the “wisdom texts” suggest a single god in one place but elsewhere use the plural *ntrw*, suggesting a full panoply of gods.¹⁵ In some senses *ntr* (*w*) is/are transcendent but more often they are immanent not only in the sun, moon and air but also in the earth and Nile. Central to their nature is the sense of transformation and renewal—*hprw*.¹⁶

Flowers are obvious symbols of such renewal. In Greece *ánthos* did not mean merely “flower” but also “growth, flower of youth.” There are many indications that Egyptians saw flowers as having deep religious significance. For example, virtually every representation of a sacrifice or offering shows flowers prominently, often tied to the head of the sarcophagus being adored. It is also clear from Egyptian religious texts that flowers could represent the gods or the blessed dead. Furthermore, as the Egyptologist Hans Bonnet put it, “their significance does not stop here. It goes deeper. The gods themselves are present in the bouquets.”¹⁷

Flowers and the blessed dead were also linked in Archaic and Classical Greece.¹⁸ The Ionian festival of Anthesteria was held when flowers began to bloom in February. While it was celebrated, the *Kêres* “spirits of the dead” (the Egyptian etymology of which will be discussed below) were supposed to rise from their graves and walk the streets.¹⁹ This myth illustrates the associations with renewal and immortality. Similar festivals were held at Delphi and Corinth during the same season.²⁰

S*ntr*, ξάνθος. A derivation of *ánthos* from *ntr* is strengthened by other related etymologies. The first example is *xanthos* from *sntṛ* (*sonte* in Coptic, itself probably from the active participle **santīr*). *Sntṛ* is the causative *s*-attached to the root *ntr*. Hence it meant “to make holy” but took on the specific meaning of “to consecrate through fire and incense.” It is through the scented smoke wafting upwards that humans can reach the gods. Even more specifically, *sntṛ* referred to the resin of the Syrian terebinth tree, which was used as incense.²¹ We can then turn to the etymological procedure of *Wörter und Sachen* “words and things” relating language to other types of evidence, as advocated by Jacob Grimm.²² We know from the famous fourteenth-century BCE shipwreck at Ulu Burun off the south-

ern coast of Turkey that *sntr* was imported into Greece in large quantities during the Bronze Age.²³ The resin varied in color from brown to yellow. The terebinth tree, τέρμινθος (4)/ τερέβινθος (LXX), can plausibly be derived from *dʒb ntr “sacred fig” especially since *términthos* is used in medicine to describe a tumor, while σύκον *sýkon* “fig” has the same subordinate meaning.²⁴ Chantraine, having no etymology, assigns τερέβινθος to the substrate. (For the idea of a sacred fig tree, see below.) If the Egyptian etymology *dʒb ntr is correct the liquid /ʒ/ requires that it must antedate the first attestations by many centuries.

The phonetic objection to the derivation of *xanthos* from *sntr* comes from the initial /x/ and from the possibility that the Mycenaean name Kasato means Xanthos. The initial /k/ in /ks/, however, may have been a soft fricative rather than a plosive.²⁵ Thus, we cannot rule out the transcription of loans from words with uncertain Egyptian and Semitic sibilants as *ks*, or for that matter *ps*, in Greek.²⁶

In contrast to the slight phonetic difficulty, the semantic correspondence between *sntr* and *xanthos* is excellent. The Greek word means “brown, yellow” and “sacred,” particularly of hair.²⁷ It also has connotations of fragrance, especially of cooked meats, and of *latex*—last drops thrown into a basin with a splash. It is also noteworthy that, according to the writer of the *Iliad*, in the “language of the gods” Xanthos was the name of the river in the Troad. It was considered the holy child of Zeus.²⁸ Most unusually for a river, Xanthos was associated with fire and flame.²⁹ The river fought on the Trojan side with Apollo, Artemis and Leto and was considered powerful enough to be a match for Hephaistos.³⁰ In this battle Homer painted the vivid picture of the river on fire.³¹ At another point, the river is described as reflecting the fires in front of Troy.³²

According to Homer, the counterpart of the divine Xanthos was given in the language of men, as Σκάμανδρος.³³ In Chapter 13, I shall discuss Greek renditions of Semitic sibilants. One of the renditions of the Semitic /š/ is /sk/. Thus, the consonantal structure of Skamandros is √šmn indicating the west Semitic god Ešmun, the counterpart of Apollo, and the river Ismenos in Boiotia and the cult of Apollo Ismenios there.³⁴

As mentioned above, *Xanthos* does not refer merely to color. The quality is clearly desirable. It has connotations of divinity and magic and is associated with the brightness of flames, cooking and aromas. Although there is no reason to doubt that Achilles’ hair described as *xánthō* was tawny, in fact the color fits his image as a lion.³⁵ The hair was also sacred, having been dedicated by his father to the river Sperkheios, where it was

ritually burnt.³⁶ It is unlikely that *xantho*, applied to divinities like Demeter or heroes like Menelaos, merely meant that they had “fair hair.” Rather, it chiefly signified their divine nature.

Another indication that the basic meaning of *xanthos* was “consecrated through fire” and that “yellow” was secondary comes from a calendrical and mythological complex. The first aspect of this is the use of the stem *xanth-* in the Macedonian festival of Ξανθικά *Xanthiká* and the month name Ξανδικός *Xandikós* or Ξανθικός *Xanthikós*, which appears to have been in early spring. This use of the stem may provide a link to another apparent rendering of *sntr*, the divinity known as Sandon, Sandan, Santas or Santa. The alternation d/t is easily explained because in the Late Egyptian and Anatolian languages dentals were neutralized.

Sandon was worshipped both in Lydia, not far from the divine river Xanthos in the Troad, and in Cilicia. Sandon’s most famous cult center in the latter place was at Tarsus, where an effigy of him was burnt annually on a great pyre, which James Frazer says was used as an emblem of the city on its coinage.³⁷ The cult had many distinctively Anatolian features but was clearly related to that of the Tyrian Melqart, seen by the Greeks as Herakles. Melqart’s image was burnt annually in Tyre, probably in connection with a festival known in Greek as the “awakening of Herakles.” It was held in early spring and concerned resurrection.³⁸ In a wider sense the burning of Sandon/Santas can be linked to a series of cults and festivals from Babylon to Cadiz. According to Frazer, they were all sanctified through fire.³⁹ He also pointed to the festivals of Herakles held with pyres to commemorate his fiery death on Mt. Oita.⁴⁰

A more specific connection between *xanthos* and Melqart-Herakles-Sandon regards quails and pigeons. Aristophanes described a roast pigeon as “beautiful and *xanthos*” in a context that suggests it meant “savory” rather than “yellow.”⁴¹ In a Greek explanation of the sacrifice of quails to the Phoenician Herakles, the story went that he had been killed in Libya by Typhon.⁴² Clearly, this explanation refers to Osiris’ murder by Seth, for whom the late Greek name was Typhon and whose home was supposed to have been in Libya. Herakles was saved when his faithful servant Ιόλαος put a roasted quail under his nose and he was revived by the delicious smell. Hence, the riddle “why is a quail stronger than Herakles?” The story, of course, resembles the normal arousal of a god’s interest by the fragrance of offerings and incense.⁴³ Frazer plausibly linked this sacrifice and myth to the annual migration of quails across the eastern Mediterranean in March, associating them with the spring and divine

resurrection. He further pointed out that some of the coins of Tarsus portraying the pyre have the inscription ὀρνυγοθήρα “quail hunt,” which “may refer to the custom of catching quails and putting them on a pyre.”⁴⁴ Thus, Sandon/Santas, Xanthiká and *xanthos* are plausible associated. All are linked by the themes of fire and consecration, the significance of *sntr*. Even many centuries later when the word was clearly a color term, Plato described it as a “mixture of flame red and white brightness.”⁴⁵

Returning to the basic meaning of *sntr* as “made sacred”: The learned Kallimakhos referred to the ancient city of Troizen as ξάνθοιο. The scholiast explained it as coming from the name Xanthos of a king of the city—one not mentioned in any other source. Wilamowitz translated it as “the town of fairhaired Troizen!” The scholar who seems closest to the interpretation of *xanthos* in this context simply as “sacred” is Meineke who suggested substituting ζαθέοιο.⁴⁶ Chantraine places ζάθεος (H) “most holy” in the cluster with the intensifying prefix *za-*. While he may be correct, it is difficult to resist the possibility of deriving this too from *sntr*.

All in all, in the derivation *sntr* > *xanthos*, the phonetic correspondence is reasonable and the semantic fit intricate and convincing. Furthermore, neither Frisk nor Chantraine accept any of the previously proposed Indo-European etymologies.

Sntr Σίντιες Σιντοί. In the first book of the *Iliad*, Homer retells Hephaistos’ description of being brutally cast out of Olympos by Zeus. The smith god fell to earth on his volcanic island of Lemnos to be looked after by the faithful Sinties, described elsewhere as the original inhabitants of the island.⁴⁷ It is sometimes supposed that Sinties referred to “bandits” coming from the stem *sin-* “pillage” discussed below.⁴⁸ With the combination of holiness and fire, a derivation from *sntr* is much more likely. With no obligation to explain names, neither Frisk nor Chantraine provide an etymology for the Sinties.

Sntr Σάτυροι, Σάτραι. Other derivations from *sntr* includes Sátyroi “Satyrs” and Satrai “a tribe in Thrace.” Frisk tentatively suggests that these names come from within Greek or are loans from Illyrian. Chantraine sees the two names as linked and as loans into Greek. More cautiously, he says that they have no assured etymology. Astour suggests that they derive from the Semitic root $\sqrt{\text{str}}$ “ravage, destroy.”⁴⁹ While the phonetic parallel is excellent, the semantics are vague compared to a

derivation from *sntr*. All scholars agree that both Satyrs and the Satrai were linked to the cult of Dionysos and are connected with phallic or priapic cults.⁵⁰ The idea of Egyptian influences on names around the northern Aegean is made less absurd by the place names Abydos and Priapos and their associations with Osiran priapic cults discussed in the previous chapter.⁵¹ No great phonetic objections exist to this etymology. The medial *-n-* was often dropped in Greek transcription of Egyptian words or names.⁵² Also, *-n-* was sometimes assimilated to a following dental within Greek.⁵³

***B3 sntr, Βρένθος, Πενθός.** In Coptic and Egyptian compound words with an accented first element the second element was strongly reduced. In this way the name of the class of Egyptian priests called ḥm ntr, and in Coptic **hom* and *nute*, became the attested form *hont*.⁵⁴ The cluster of Greek words around **βρένθος** (6) has bewildered lexicographers. It contains the meanings “aquatic bird, proud, arrogant, perfume, plant, tomb.” Frisk writes straightforwardly, “All etymologies are in reality floating in the air.” Chantraine states:

If one starts with the bird’s name, there is no etymology. For those aspects concerning plants and perfume a non-Indo-European origin is plausible. It is possible that among the words we have assembled in this article one should distinguish two groups with independent origin, on the one hand the bird and arrogance, on the other the names of plants or perfumes.

Neither scholar deals with Hesychios’ equation of *brenthos* and *tumbos* as “tomb.”

The various meanings of *brenthos* can find a single source from Egyptian. The *b3* or Ba was one of the many Egyptian souls, particularly of the risen dead or of the soul that flies out of the tomb later returning to nourish the body. It was originally written  (G29), a bird commonly associated with the jabiru stork.⁵⁵ From the Eighteenth Dynasty this sign began to be alternated with a number of different signs, notably  (G53). Egyptologists see it merely as a variant writing of *b3*. As Gardiner points out, this glyph is made up of two parts: a human-headed Ba bird and  (R7) “brazier” *sntr*.⁵⁶ In his detailed study of the Ba, Louis Zabkar refers to the increased emphasis in the New Kingdom and “late” inscriptions on Bas flying to heaven and becoming deified *ntr* or *sntr*. He does not mention the adoption of the new hieroglyph.⁵⁷ On the basis of what I

see as Greek derivations, I am convinced that as with $\text{𓂏}^{\text{h}} *k3 \text{ ntr}$ (discussed in the next section) both elements of the hieroglyph could be treated phonetically. In this case 𓂏 could be read $*b3(s) \text{ ntr}$.

The phonetic parallel with *brenthos* is good, especially if the word arrived in Greek before the weakening of medial -s- in the middle of the Second Millennium. A consonantal realization of the /3/ would also indicate an early borrowing.

The semantic match is precise. Ba as bird or striding stork explains the arrogance. As with *sntr* as *xanthos*, *sntr* in $*b3 \text{ sntr}$ signified incense and perfume, particularly with that of myrrh which is associated with death, burial and the tomb. Ba birds fly around tombs. The idea that the concept and word could have been introduced by the middle of the Second Millennium is reinforced iconographically by Mycenaean representations of soul birds. Emily Vermeule clearly derived these from the Egyptian *b3*.⁵⁸ She wrote, "There is little doubt that the Egyptian *Ba*-soul was the model for the Greek soul-bird and for its mythological offshoots, the Siren and the Harpy, both of whom had intense and often sustaining relations with the dead."⁵⁹

Σειρῆνες, Sirens, provide a link between soul birds and mourning. Chantraine describes the etymology of the name as "obscure." Neither he nor Frisk mentions Lewy's proposal to derive it from the Semitic $*s(\tilde{s})\dot{r}$ ḥēn. "song of grace."⁶⁰ The correspondence between $s(\tilde{s})\dot{r}$ and the **Si**rens, whose chief and only quality is their singing, is undeniable. The second element, however, is more controversial. Victor Bérard preferred $*s(\tilde{s})\dot{r} > \text{an}$ "song of entrapment."⁶¹ He claims that this is a widespread Semitic root, but I can find it only in Aramaic. Seirēn has now been found in Mycenaean, which makes a loan from that language unlikely. Another possibility is from the root $\sqrt{\text{an}}$ "groan, mourn." In Hebrew it is $>\dot{a}n\dot{a}h$ or $>\dot{a}n\dot{a}h$ in Arabic $>anna$. Vermeule, in her book *Death in Early Greek Art*, illustrates an Attic black-figured bowl with modeled mourners on the rim and painted Sirens around the bowl itself.⁶² She pointed out, in the quotation given above, that Sirens had "intense and often sustaining relations with the dead." For instance, they possessed a "flowery meadow," $\lambda\epsilon\iota\mu\omega\nu \dot{\alpha}\nu\theta\epsilon\mu\omicron\epsilon\nu\tau\alpha$.⁶³ Vermeule also describes a Mycenaean coffin from Tanagra, illustrated with a picture of "a bird stalking through a flowery meadow behind two soldiers."⁶⁴ This brings one back to the Egyptian paradise, or $\text{Sh}t \text{ i}3\text{rw}$ "Field of Rushes," discussed later in this chapter.⁶⁵

As a child, my father was disappointed when he first heard nightin-

gales. He had hoped and assumed that they would sing like people! Nevertheless, many cultures, including those speaking Semitic and Greek languages, refer to bird “song.” Lewy and Bérard both mention the term used in Qohelet, *bənôt haššir*, literally “daughters of song.”⁶⁶ They see this term as a parallel to the Sirens. The verse, however, refers to chirping sparrows. Thus, most commentators see *bənôt haššir* as referring to birds singing. Furthermore these birds are frequently associated with mourning. The mourning dove is not the only bird with this association.

In addition, mourners can become or represent birds. In Egypt Isis and Nephtys, mourning Osiris, were the *drty* “two kites” represented at funerals by women.⁶⁷ Apollodoros refers twice to mourners being turned into birds.⁶⁸ Thus song, birds and mourning seem tightly entangled symbols in both Egypt and Greece, with the Ba, or soul bird, at the center.

Lexicographers subsume the word Πενθός (H) “mourning,” πενθέω “I mourn” and other derivatives under πάσχω “experience” or “suffer.” Despite the /a/ sometimes /o/ in *paskhō*, they justify the /e/ in *penthos* by the future form πείσομαι. The semantic gap between *paskhō* and *penthos* is even greater than the phonetic one. A derivation from **Bʒsntr* after the loss of the consonantal /3/ would seem more likely. The chief difficulty would be the required dropping of the medial /s/ after the general shift in Greek.

Michael Astour points out that the mythical Pentheus torn apart by the Bakkhai is a doublet of Dionysos, who was himself known as Bakkhos or Bakkheus. Astour plausibly derives that name from the West Semitic *bākūy* “bewailed,” the passive participle of the verb √bky. He sees this as a Semitic-Greek doublet.⁶⁹ I see it as an Aegypto Egyptian-Semitic doublet in Greek. In Chapter 18 I shall make a case for deriving the name of the Latin god Līber, another equivalent of Dionysos and Bakkhos, from *rmi* “weep” in Egyptian.⁷⁰

**Kʒ ntr*; *κάνθαρος*, *καθαρός*. At this point we should turn to an alternation between retention and loss of the -n- in *ntr* that can be seen in the two semantically related words *kántharos* and *katharós*. Frisk finds no “acceptable” etymology for either and Chantraine also provides none, although he tentatively proposes that *kántharos* comes from “the substrate.” *Katharós* means “clean, purge, pure.” *Kántharos* signifies “a scarab, a type of fish, a type of boat, plant, the mark on the tongue of an Apis bull and a cup with large handles.” Szemerényi plausibly derives *kántharos* in the last sense from the Akkadian *kanduru* “cup with large handles”⁷¹ Accepting

this etymology, however, still leaves a bewildering number of other meanings unexplained. Two of these, “a scarab” and “the mark on the tongue of an Apis bull,” have clear connections not merely with Egypt but specifically with Egyptian religion. Thus, the semantics of the Greek word would seem to require an Egyptian etymon that is both vague and religious. I believe that this can be found in the Egyptian *k3 ntr “holy spirit.” The asterisk is there because Egyptologists do not recognize such a form. As with their failure to distinguish  from , they see the frequently used hieroglyph  (D29) simply as an alternative for k3  “soul, spirit.” The bottom section  (R12) i3t “standard” is a sign widely used to designate divinities; ntr is the standard word for this sign. Thus,  as a sign for the combination *k3ntr would seem very likely. This hypothesis is strengthened by two Coptic words *ktēr* or *kater* “calf,” possibly linked to the Apis bull, and *kente* (B) *kentē* (F) and *knte* (S) “fig, sacred tree,” deriving from *kunte.⁷² An etymology from *k3ntr “holy spirit” would also seem plausible for *katharós* and such derivatives as *kathársis*. A parallel for this type of structure are the forms K3 ḥtp “contented k3” and *k3 ḥk3 “magic k3.” Erman and Grapow plausibly envisaged the latter term.⁷³

***K3 ntr; Κάανθος, Κύνθος, Κάναθος, Κένταυρος.** Other Greek renditions of *k3 ntr with different vocalizations include Kaanthos, Kanathos, Kynthos, and Kentauros. Kaanthos and Kanathos were remarkably similar heroes. According to Pausanias, Kaanthos’ tomb was by the spring of Ares near the temple of Apollo Ismenios outside Thebes. This location is also associated with Kadmos’ struggle with a dragon.⁷⁴ Just as Kadmos pursued Europa, Kaanthos searched for his sister Μέλια in vain.

Before continuing with Kaanthos we should consider Melia. The two were children of Ocean. The early twentieth-century scholar Antonios Keramopoulos identified Melia as the original name of the spring known as Ares.⁷⁵ Given her watery connections, which will be discussed further in the next section, this identification seems plausible. Chantraine provides no etymology, but Melia’s name seems to derive from the Egyptian *mr* “canal, artificial lake.” A cognate word *mr* “libation trough, metal vessel” appears in Greek as μέλη (4) “type of cup.” Melia was the first of the Melian nymphs. An ancient tradition going back to Hesiod traces the nymph’s name to μελία “ash tree,” which sprouted from the blood of Uranos’ severed genitals.⁷⁶ Given the parallel of the Dryads “oak nymphs,” this tradition is inherently plausible. On the other hand, Melia’s

association with a spring coupled with the fact (stressed in Chapter 9 and discussed further in Chapter 11) that nymphs are in general concerned with water make it hard to deny a strong possibility that there was at least paronomasia or punning involved here.⁷⁷

After Kaanthos failed to rescue his sister, his story diverged from that of Kadmos. He found that she had been abducted by Apollo, so in fury he burnt Apollo's temple. The god then shot him with an arrow, hence the tomb.⁷⁸ Joseph Fontenrose pointed out that a papyrus found at Oxyrhynchus told a similar story in which Ismenios (Apollo) killed a certain Klaaitos. Fontenrose sees this name as a "corruption of Kaanthos, which itself could be a corrupt form."⁷⁹ A source that would explain both names is *k3 ntr. The use of /3/ as a liquid suggests that Klaaitos was the earlier form, but it could also be an archaism.

Kánathos appears to have been a hero connected with a spring of that name near Lerna in the Argolid. The spring is the one in which Hera washed every year to renew her virginity.⁸⁰ This association brings the name closer to *katharos* and *katharsis* "purify." Kaanthos' association with the spring also makes sense if it too derived from *k3 ntr "holy spirit."

***k3 ntr; Κύνθος.** Mount Kynthos, one of the most holy sites in the Aegean, was the legendary birthplace of Apollo and Artemis. The mountain is on the sacred island of Delos, also the site of a temple of Zeus, who is seen as looking over the birth of his children.⁸¹ (This topic will be treated further in Chapter 19.) It will be noted that all the previously proposed derivations of *k3 ntr have been vocalized with an /a/. The ambiguities of this vocalization, seen in manuscript variants of the adjectival Κύνθιος of Καύθιος or Κάνθιος, probably resulted from an earlier *k^war, which was discussed in Chapter 5.⁸²

***k3 ntr; Κένταυροι.** The familiar image of a centaur is of the kindly hybrid horse-man Kheirōn, the instructor of Aesculapius in the art of healing. Despite the fact that their name ends in -taur, nothing associates centaurs with bulls, although an association with bulls may have altered the shape of the word. In Homer the centaurs were simply a savage race, known for their ferocity and their enmity to mankind and above all for their scattering after unsuccessful battles with the Lapithai.⁸³ On the other hand, their image would fit well with riders originally living on the Thessalian Plain. Homer described Kheirōn as "the best of the centaurs" and as a teacher of medicine.⁸⁴ Kentauros had other meanings:

“brutal paedophilia” from the behavior of centaurs. Its use for “*pudenda*” is less easy to explain in this way. *Κενταυρίς* was the name of a medicinal herb and of a type of earring. Thus, very much as with *kantharos*, the many varied meanings suggest a vague original term. The euphemistic use of a “sacred” word to describe wild outsiders would parallel the names Satyroi and Satrai referred to above. Similarly, the Egyptian use T3 nṯr “holy land” for a belt of distant countries ranging from Pwnt in Africa to northern Syria and Anatolia.⁸⁵

K3; κάρ, and κήρ. Now, to turn to *k3* itself, Jasanoff and Nussbaum’s initial critique of my derivation of Greek *kár* / *kér* from the Egyptian *k3* is that I rely on an interpretation of /3/ as a liquid. (This has been discussed above, in Chapter 8.⁸⁶) They objected, too, on the additional grounds that dialectical distribution indicated that *kér* was not merely the result of the shift ā>ē in Attic and Ionic. Rather, it had existed independently. These different forms they explained as follows:

Both vocalisms are easily accounted for under the standard assumption of a PIE “root noun” **kér* (nom.sg.), **kṛr-és* (gen. sg.), literally “a cutting (off), a termination” (cf. *keirō* < **ker-yō* “I cut”). Such a verbal noun—perfectly regular in PIE terms—would have yielded an early Greek paradigm **kér*, **kar-ós* the weak stem of which (**kar-*) was taken as a departure for the creation of a new nom. sg. *kár* in some dialects.⁸⁷

Unfortunately, for all its professional mystification, this cumbersome “standard” explanation is not accepted by the “standard” etymological lexicographers, Frisk writes that the solution to the dialect pattern is “perhaps possible.” Chantraine, is more skeptical and concludes the lemma on *kér* with the statement “the word remains obscure.”

The long /ē/ in other dialects is not straightforward. The reconstruction of *k3* as **k^war*, given in Chapter 5, however, makes its rendition into Greek uncertain. In any event, at the risk of misplaced precision, the Greek vocalic alternation could be explained as the result of hesitation in Egyptian between the initial /k^w **kūr*>*kér* and the following /a/ **kār* explaining an earlier borrowing into Greek.⁸⁸ In any event, given the possibilities of cultural influence from the *kēres* on Homer or Attic Greek a demand for this kind of precision is inappropriate.

Jasanoff and Nussbaum’s semantic arguments are equally flimsy. Chantraine cites an article by the classicist J. N. Lee who argued that *kér*

was less “death and ruin” but more “fate.”⁸⁹ More importantly, in *Black Athena* 2 (263–264), I wrote

The Greek *kḗr* . . . , is a term of rich and complex religious significance. There is no doubt that it came to mean “fate, doom, or violent death.” However, . . . Homer was also using it in a different sense of individual fate or “soul.” This, according to one passage in the *Iliad*, was appointed to a man at birth to meet him at his death.^[90] This same sense was preserved in the ancient formula used in the Athenian festival of Anthesteria—in which the souls of the dead revisit the living—“get out *kēres* the Anthesteria is over.”^[91] Thus, this sense of *kḗr* as an individual soul would seem to be central to its original meaning

The concept of *k3*, commonly written *ka*, which is central to Egyptian theology, has an even richer semantic field. [To paraphrase the Egyptologist Peter Kaplony:] As the hieroglyph , represented open or embracing arms, the original meaning of *ka* would seem to be one of relations between beings: god and god; god and man; man and man. In the sense of father and son, it gained connotations of personal and institutional continuity and immortality.^[92]

At a less abstract level, Adolph Erman defined *k3* in the following way in his dictionary: “a) The *ka* was born with a man and had human form, in particular arms with which it protectively embraced men. b) The *ka* is the companion of a man to whom the man goes at his death.” Erman notes that in Demotic *k3* is frequently associated with *š3y* “fate.”⁹³ Thus, the semantic fit between *kḗr* and *k3* is nearly perfect and, given the equality of the phonetic ones, the Afroasiatic etymology is to be preferred over an Indo-European origin.

2. *ʿnh* (*ankh*)

Alan Bomhard postulates a Nostratic root, *ʿan-aḥ* or *ʿən-aḥ* “to breathe, to respire, to live.” In Indo-European he finds examples of this in the Sanskrit *āniti*, *ānati* “breathe” and the Latin *anima* “breath wind” and *animus* “soul.”⁹⁴ The Afroasiatic example was the Egyptian *ʿnh* (*ankh*). [♀] (S34). It was, and remains, one of the most potent symbols of life in

Ancient Egyptian and many later cultures.⁹⁵ More than a dozen attempts at explaining the origin of the sign have been tried, and the conventional view is that the sign derives from a sandal strap.⁹⁶ In 1982, however, two veterinary surgeons, Calvin Schwabe and Joyce Adams, joined the linguist and Egyptologist Carleton Hodge to provide a new and more plausible derivation:⁹⁷ the upside down thoracic vertebra of a humped bull. This explanation fits two features of Ancient Egyptian culture: first, the centrality of cattle and the use of cattle parts in hieroglyphics to represent those of humans; second, the belief that the spine leading to the phallus was the source of life. This is not to deny that the rebus or punning principle was employed so the sign could be used for words with the consonants *nh* with different meanings and different etymologies. It should be expected that such an important and frequently used set of words should have had an effect beyond Egypt and some of these, which were transmitted into Greek, will be discussed below. At this point, however, I shall consider a compound in which *nh* has the basic meaning of “life.”

nh; (F)ἄναξ, (F)ἄνακτος. The Bronze Age title for king is attested in Linear B as *wanaka*, dative *wanakate*, and in Homer as (F) ἄναξ. The (*w*)*anax* held an exalted position, far above *basileus*, which, during the Second Millennium, only meant “minister, vizier.”⁹⁸ *Anax* has many derivatives, usually with the root *anass-*, concerned with kingliness and rule. It has a cognate in the Phrygian *wanakt*, about which Chantraine wrote, however, that it “must be borrowed from Greek.”

Conventional wisdom has held that the stem was **wanak*, but Szemerényi has forcefully maintained that the stem was **wanakt* and that only from a cluster *kty* could one explain the derived forms with an /s/, the feminine *wanassa* and the verb *wanassō* “rule.” On the other hand, I do not think that one can easily dismiss the testimony of the tablets that the stem was originally *wanaka(t)*, although the final -a- may have been syncopated later to become *wanakt*. In any event, Szemerényi went on to say, “The next and decisive question is of course: what can we say about the origin of this term? The unanimous answer seems to be: nothing, the word is “*unerklärt*,” “*étymologie inconnue*.” At most the suspicion is voiced that it is a loan word.”⁹⁹ Szemerényi then proposed his own etymology from an Indo-European word root **wen* “kin, tribe” and *ag* “lead” with -t- as an agental suffix. The /e/ in **wen* was transformed by euphony into **wan*.¹⁰⁰ Szemerényi is explicit about his motive for proposing this seemingly far-fetched origin: “And the IE origin of this term would very nicely

agree with the finding that *Ῥάναξ* was succeeded in the sense of ‘king’ by the substratum word *βασιλεύς*.” As I explained in Chapter 9, I see *basileus* as coming not from the substratum, but from Egyptian.¹⁰¹

The Egyptian etymology I propose is from *ʿnh dt* “may he live forever.” This formula was normally placed after the names of living pharaohs. It was even treated as an independent noun phrase as in the common conclusion to dedicatory inscriptions *irrf ʿnh(w) dt* “may he make; he lives eternally.”¹⁰²

Other uses of the Greek stem *(w)anaka(t)* also indicate a connection with *ʿnh*: *Ἀνακτόριον* *Anaktorion* is generally supposed to mean “royal dwelling.” In fact, however, the word was used exclusively in connection with the Eleusinian Mysteries with their strong Egyptian connections.¹⁰³ Furthermore, as Plutarch and others made clear, the chamber itself was relatively small with an opening on its roof and high up within the building. The space contained the *hiera* “sacred objects” of the mysteries; these could only be seen by the chief priest or hierophant.¹⁰⁴ This name can plausibly be derived from the Egyptian euphemistic use of *ʿnh* as “sarcophagus, that of the living,” used particularly of Osiris. The “sarcophagous” contained objects of great sanctity. The whole was central to the Osiran Mysteries.¹⁰⁵

Linked to this word is the *ὄγκιον* a box or chest in which Odysseus kept iron and bronze axes.¹⁰⁶ Frisk and Chantraine derive this from *ὄγκος* “weight or mass.”

Anaktos is used as an adjective to describe water drawn from a spring, a meaning still further removed from “royalty.” It can, however, be plausibly derived from *mw ʿnh* “the water of life” that Osiris gives to the soul.¹⁰⁷ One should consider the gift of spring water to the soul referred to in Orphic texts.¹⁰⁸ In the same context there is the snatch from the lost early epic, the *Danais* referring to the *ἐνυρρεῖος ποτάμου Νεῖλοιο ἀνάκτος*.¹⁰⁹ Given the Greek trope of the life-giving and life-sustaining power of the Nile, the *ἀνάκτος* here would seem much more likely to refer to “living” than to “royal.”¹¹⁰ The idea of fresh or “living,” as opposed to other waters, also appears in the common Hebrew expression *mayim hayim* “living” or “running” water.¹¹¹

Another likely loan into Greek from *ʿnh* is *Ἰναχος*—Inakhos. This name has both royal and fluvial connotations. In *The Suppliants* Aiskhylos describes him as a divinity, a river and as the founder of the royal line of Argos.¹¹² In this passage the playwright draws a clear distinction between the Greek Inakhos and the Egyptian Nile. Where the principal meaning

of Argos on the Inakhos, however, is “silver,” Memphis, which is on the Nile, is also known as *inb ḥd*, “silver walls.”¹¹³ The name Inakhos has no Indo-European etymology and is thought to be “pre-Greek.”

Thus the semantic fits, between *ḥh* (*w*) *dt* and (*w*)*anax* (*w*)*anaktos* and between *ḥh* and *Anaktórion* “sarcophagus” and *anaktos* as “living” are very good. Even the phonetic problems are not insuperable. An Egyptian or Semitic /ḥ/ was frequently rendered as a Greek /k/. This rendition is attested specifically for *ḥh* in the derivation of Σφίγξ, Σφίγος, Sphínx, Sphingós, also rendered Σφίξ, Σφικός, Sphíx, Sphikós, from *ššpw ḥh* “living image.”¹¹⁴

The formula *ḥh* (*w*) *dt* is an exclamatory use of the stative or old perfective. It is analogous to the Afroasiatic suffix or “nominal” conjugations which seemed to have had the vocalization CaCaC(a), the Semitic *qaṭala*.¹¹⁵ There are two phonetic difficulties: The first is the third-person suffix -w found in *ḥh* (*w*). The brackets indicate it was seldom written and Vycichil reconstructs *ḥh* “may he live” as **ḥ anḥa* without the final -w and missing the medial -a-.¹¹⁶ The second, and more serious, problem is with the derivation of the initial Greek digamma *Fw-* in (*w*)*anax* from an Egyptian *ḥyin*.¹¹⁷ There are, however, some interesting correspondences between this pharyngeal fricative and the semivowel in both Semitic and Egyptian. The identity of the Akkadian sign for /u/ with the Ugaritic sign for *ḥyin*, which corresponded to the linear Canaanite O. The Ugaritic letter is also once attested as representing a vocalic /o/.¹¹⁸

Egyptian has several correspondences between /w/ and /ʿ/. These include *ʿ3* and *wr* as two near homonyms for “great” and *ḏ* “hack up” and *ḏt* “slaughter” and *wḏ* “cut, chords, head” etc. There are also the pairs *ḏ* “be safe” and *wḏ3* “whole uninjured, safe” and *ḥ3* “present in a ritual manner” and *wḥ* “pure or priest.” The last is one of a large number of Egyptian words in which /w/ and /ʿ/ appear jointly in the initial position. In Coptic, etymological /ʿ/ was frequently vocalized as /o/ or /w/. In 1947 Gardiner assumed that *pr ḥh* “house of life” or “house of documents” [university?] should be vocalized in Late Egyptian as Pi *ʿonkh*, even though he had previously discussed a Coptic form *franš*.¹¹⁹ Nevertheless, the normal form of the Coptic verb “to live” was *ō nh*. Thus, there is little difficulty in postulating an earlier vocalization of **wʿanḥa dt* as an etymon for **wanakat*. The -t s in Ἀνακτόριον and ἄνακτος “living” would be by analogy.

It is not surprising that Mycenaean rulers wanted to imitate Egyptian

pharaohs. Such an indication would explain the Homeric phrase “honored by the people like a god” and possibly the scene on the Hagia Triada sarcophagus in which a person, probably dead, appears to be worshipped. The Wanax did seem to have important religious functions.¹²⁰ As Astour points out, however, both Linear B documents and Homer indicate that in political reality the Aegean rulers, like those elsewhere in the Bronze Age eastern Mediterranean, had—to some extent at least—to share his power with other officials or traditional chiefs.¹²¹

A special meaning of *ῆη* is “captive” $\mathfrak{A}13$ [taken alive rather than killed]. In Coptic *anaš* (SB) *anaḥ* (A) means “oath, something you are bound to.” Homer used *ἀνάγκη* to convey “constraint,” among other instances in the image of Andromache in slavery.¹²² It was later used in the more general sense of “necessity.” Chantraine dismisses all proposed etymologies for *anánkē*. Thus, despite the second /n/, here too a derivation from Egyptian is plausible.

Ἐνέχω can be explained simply as being “held” ἔχω “in” εν. In what appears to be an extension of this, the stem ἐνεχυρ- means “pledge” and may well reflect contamination from *ῆη*.

3. M(w)DW, μῦθος

In 1953 the Soviet Coptologist P. V. Jernstedt proposed that the Greek *μῦθος* (H) derived from the Egyptian *m(w)dw*.¹²³ *Mythos* originally meant “succession of words with meaning, discourse.” Later it was restricted to “fiction, myth.”¹²⁴ The Egyptian *m(w)dw* “words, discourse” could be used for both spoken and written words. Thus, *mdw ntr* was both the “the word of god” and “sacred writings.” The masculine *mdw* was later displaced by the feminine form *mdt*. The Coptic verb *mute*, however, indicates that in some circumstances it kept its initial vowel, even though *mdt* in the sense of “casting a spell” was rendered *mtau*.

Frisk supposes that *mythos* comes from an “onomatopoeic” *mu* with a suffix -thos. Chantraine is not impressed and describes its origin as “obscure.” In this situation an etymology from *m(w)dw* is very attractive in both its phonetics and sense.

4. Sb3

Σοφία (H) Σοφός. In its phonetics the hypothetical Indo-European root **suaḡaḡhós*, proposed by Brugmann and accepted by the lexicographers

Boisacq and Hoffmann, fits *sophós* quite well.¹²⁵ This is not surprising since it was designed expressly for that purpose. The only non-Greek cognate Brugmann proposed was the Latin *tuor* “gaze.” In any event, the inherent improbability of this suggestion has led to Pokorny’s dropping the proposal.¹²⁶ Frisk declared that the origin of *sophos* was “obscure” and Chantraine simply that it had “no etymology.” Despite the extreme rarity of native Greek words beginning with sV-, none of these scholars raise the possibility of a loan.

Soph- and its many derivatives are all centered on the idea of “learned skill, teaching, learning.” The most obvious origin is from the Egyptian root *sb3* “to teach, teaching school, pupil.”¹²⁷ In Middle Egyptian it is used as the verb “to teach” and as a noun with such different determinatives as “school, pupil” and, when appearing as *sb3yt*, written “teaching instructions.” It is attested in Late Egyptian with the agential -w, as *sb3w* “teacher.”¹²⁸ The consonantal structure presents no problem. The borrowing is obviously late, clearly after the Greek shift s->h- and after /3/ had lost its liquid value.

Some problems arise with the vocalization. Vycichl lists five different Coptic derivations of the root: *sbō*, “teaching, education, intelligence,” the adjective *sabe* “wise, intelligent, judicious,” *sbui* “disciple, apprentice,” *seb* “intelligent, cunning” and *sbo* “to learn, teach.”¹²⁹ The disappearance of the first vowel in *sbō*, *sbui* and *sbo* suggests that it was previously short and unstressed. On the other hand, *seb* and a compound form -*zēb* “school” suggests to Vycichl a derivation from a short /u/. In general, Coptic first vowels were short and unstressed as they are in the Greek *sophía* and *sophós*. The accented /í/ in *sophía* indicates a relationship to the -y- in *sb3yt*. Although no single form provides an etymology for the Greek terms, the wide range of Egyptian vocalizations makes it easy to derive the Greek *soph-*.

The excellent semantic fit is strengthened by the Greek association of wisdom in general, and φιλοσοφία “philosophía” (6) in particular, with Egypt and Pythagoras who, according to all ancient authorities, had studied there. Cicero in the first century BCE stated that Pythagoras had called himself a *philosophos* not a *sophos*.¹³⁰ Diogenes Laertius, and Clement of Alexandria of the second century CE agree that the first man to use the term *philosophía* was Pythagoras.¹³¹ Four hundred years before these writers, the orator Isokrates had specified, though in a parody, that Pythagoras had brought “all philosophy to the Greeks” from Egypt.¹³²

The Coptic *maisbō* “loving wisdom” was used as a translation of the

Greek *philomáthōn* “loving learning, curiosity.” The Greek *philosophía* would appear to be a calque not a borrowing, although *phitō* was an earlier loan from Egyptian.¹³³

Sapiō, Sapiēns. At the beginning of his discussion leading to the form **ῥωαοῦῥῥός*, Brugmann remarked that “the beloved placing together of σοφός with *sapiēns* . . . should be . . . discarded.”¹³⁴ Given the rules of genetic relationships within Indo-European he was absolutely right. The same strict rules do not apply, however, to loaning either from Greek or directly from Egyptian. The complication of the verb *sapiō*, and of the cluster of words around it is that it contains two semantic overlapping, but not identical, fields: “to taste and discern” (from which “savor”) and “to know and be wise” (from which the French *savoir*). In the first sense it appears to have cognates in Germanic: the Old Saxon *an-sebbian* “to perceive, notice,” the Old High German *int-seffen* “to notice, taste.” There is, however, the Old Icelandic *sefi* “thought.”

In its second semantic field, *sapiō* had cognates in other Italic languages: the Oscan *sipus* and the Volscian *sepu* “knowing.” These cognates indicate that, if the word came from the Greek *sophía* or the Egyptian *sb3*, it arrived on the peninsula before Roman domination. There is no reason to suppose that the Latin form was more developed than the others, as its vocalization clearly fits a Greek and Egyptian prototype more closely than those, particularly in the second /i/. The initial a- would fit a loan from Egyptian very well. The second semantic field was clearly seen to resemble that of *sophía* and *philosophía*. Ennius, the earliest Latin playwright whose works are still extant, used *sapiēns* to translate them. Thus, the second sense of *sapiō* clearly derives from Egyptian, and the Teutonic forms for the first meaning may also do so.

Ṣabaeans?

The Ṣabaeans, not to be confused with the Sabaeans from Sheba at the foot of the Red Sea, are one of the anomalies in early Islamic histories.¹³⁵ They were mentioned in the Koran as a “People of the Book.” Michel Tardieu, who has written the most recent work on them, sees two communities: one based on Harran in what is now northern Iraq where Greco-Mesopotamian religion and culture survived until the Mongol invasion in the thirteenth century CE. The other was of cultivated “pagans,” who survived and, for a while, flourished in Baghdad. This di-

chotomy is confused by the fact that the best-known Šabaeen, the great ninth-century mathematician, astronomer and translator, Thabit ibn Kurra, moved from Harran to Baghdad.¹³⁶ Interestingly, by that same century Šabaeans were known to have taken the Egyptian *Corpus Hermeticum* as a holy scripture and generally to have assumed a “kind of Gnostic identity.”¹³⁷ Thus, it is plausible to suppose that the name Šabaeen derived from *sb3* “wisdom.”

More ancient borrowings?

Σίβυλλα. Sibyls were prophetesses first attested in Anatolia but later found elsewhere around the Mediterranean. They uttered ecstatic oracles. What is striking about them is that so many of the prophecies were written down. As Walter Burkert puts it, “Sibyl oracles which last a thousand years probably played a leading role among *written* oracles . . .” [my italics]. Most long lasting were the *libri Sibyllini*—written in Greek—in Rome.¹³⁸ The etymology of *Síbylla* is unknown. Frisk rejects previous attempts and Chantraine agrees with him that its origin is unknown. One possibility is that it derives from the Egyptian *sb3yt* “written teaching, instructions” when the /3/ still had consonantal value.

If the parallels between the semantics and the consonantal structure of *sb3yt* with *Síbylla* are very good, the correspondence of the vowels does not reach the same high level. Given the uncertainty of the first unstressed short vowel in *sb3yt* Coptic *sbō*, the /i/ in *Síbylla* is not a great impediment. The position of the /3/ before the *y* is more serious. *Sb3yt* is consistently written in this way and, if anything, “narrow vertical signs such as  /y/ tend to precede the birds such as the  /3/ that should follow them.”¹³⁹ Therefore, a reading **sby3t* is unlikely. Nevertheless, the general ease of metathesis with liquids, especially with vowels, allows the etymology to remain viable in the absence of any competitors.

The derivation of Sibyl from *sb3yt* is strengthened by the existence of λόγοι *συβαρῑτικοί* “fables.” These are generally associated with the city of Sybaris in Lucania in southern Italy, which may have gained its name from another **sb3* “variegated, luxury.”¹⁴⁰

Finally, Pausanias mentions a Sibyl among the Jews of Palestine called Sabbe, thus bringing together two derivations of *sb3*.¹⁴¹

Sb3. The centrality of astronomy in Egyptian intellectual culture is shown by the fact that *sb3* is nearly always written with the star  (n14) either

as a triliteral or as a determinative.¹⁴² With this and Α, the sign to represent the star, *sbʒ* was a surveying instrument for measuring the elevation of the sun and other heavenly bodies, an instrument significantly still known by its Greek name “gnomon.”¹⁴³ The Greek term is derived from the verb γιννώσκω “to know” and is, therefore, a calque on *sbʒ*.

The adjective *thnt* is defined as “brilliant, flashing, jewel,” and as “blue green,” the color of faience.¹⁴⁴ It also seems to have been the color of the bright sky and fragments of the firmament as they appeared on earth in the form of the green mineral, malachite (*wʒd*).¹⁴⁵ This heavenly source also appears to have been seen as the origin of lapis lazuli (*hsbd*), also the word for “blue.” In fact, the stone itself came from Afghanistan. Neither of these words appears to have traveled, but *sbʒ*, both as star and as firmament, has. For example, a Hebrew word *sap̄ir* “lapis lazuli” is isolated and is universally accepted to be a loan word. The conventional origin first proposed by the distinguished Semitist and notorious anti-Semite Paul Lagarde is from the Sanskrit *ṣanipriya* “dear to Saturn, dark-colored stone.”¹⁴⁶ Scholars also generally accept Lewy’s derivation of the Greek σάπφειρος (4) “lapis lazuli,” later “sapphire” from the Hebrew *sap̄ir*.¹⁴⁷ The lexicographers of Greek doubt the Sanskrit etymology. Chantraine does not mention it and Frisk calls it “very questionable.” A derivation from *sbʒ* “star, pieces from the blue chrystaline firmament in which they were set” would seem much more plausible.

sbʒ σφαῖρα. Frisk writes about *sphaîra*, “formation like *peîra*, *speîra*, *moîra* and the like without correspondences beyond Greek.”¹⁴⁸ Naturally he meant within Indo-European. Many later writers attributed to Pythagoras and Anaximander the use of *sphaîra* to express the “sphere” or ring holding the planets and the stars around the world.¹⁴⁹ The lexicographers maintain, however, that the basic meaning is “ball” and the earliest reference is in the *Odyssey*. Interestingly, all these references occur in Books 6 and 8, concerning the mysterious island of Σχερίη. Scholars have long agreed that Skheriē was a location of the afterlife close to Ἠλύσιον, Elysium. Even though the concept of Elysium drew on other sources, the association with the Egyptian afterlife for the blessed elite, the Field of Rushes, was clear even to Martin Nilsson.¹⁵⁰ Garth Alford rightly emphasizes the Egyptian component. Nevertheless, his claim that Ἠλύσιον can be derived from the Egyptian term *Sh̄t iʒrw* “Field of Rushes” seems far-fetched.¹⁵¹ On the other hand, with the disappearance of the feminine -t, **Sh̄t iʒrw* does provide a plausible etymology for

Skherie.¹⁵² The toponym for this mythical blessed island lacks an Indo-European etymology.

The heavenly and stellar aspects of the Egyptian voyage of the dead are well known, and in many ways the Phaeaceans with their magic ships resemble stars. The best-known Homeric passage concerning *sphaîra* is the following:

Then Alcinous bade Halios and Laodamas dance alone, for no one could vie with them. And when they had taken into their hands the beautiful ball [*sphaîra(n)*] of purple (*porphyreēn*), whichwise Polybos^[153] had made for them, the one would lean backwards and toss it toward the shadowy clouds, and the other would leap up and catch it before his feet touched the ground again. But when they tried their skill at throwing the ball straight up, the two fell to dancing on the bounteous earth, ever tossing the ball to and fro.¹⁵⁴

This selection could be taken literally but, given the otherworldly nature of the Phaeacians and their stellar connotations as well as the later attestations of *sphaîra* as “sphere,” the dance could also have been symbolic. Hence, if one accepts the association of stars and their spheres, the semantic links between *sbʒ* and *sphaîra* are reasonably good. Similarly, that the first vowel in *sbʒ* was short and unstressed makes the phonetic case quite plausible.

Conclusion on *sbʒ*. Clearly, the quality of these derivations from *sbʒ* varies a great deal. The strongest, *sophía/sophós*, must be a loan; it has no Indo-European competitor and is semantically congruent. The derivations of *σάπφειρος* through the Canaanite *sapir* and the Šabaeans are only a little less strong. The etymologies of *sapiō*, Sybil and *sphaîra* are weaker but still plausible. Even under a minimalist view, this important Egyptian stem has resonated significantly in Greek language and culture.

5. DR, R-DR, DRW

τέλος (H), τελέω, τέλλω (H), τελευτη (H), τη̃λε. The extraordinarily productive Greek stem *tel-* has the basic sense of “limit” sometimes in space but usually in time. It also includes the meaning of “to the limit, complete, fulfilled, perfect.” This is also one of the meanings of *tellō*. Chantraine sees *telos* as a confusion of two words. The secondary meaning is similar to *tellō* in the sense “raise, lift.” Though Chantraine

does not mention it, this seems to me to derive from the Indo-European root *tel “to raise.”¹⁵⁵ According to him, the primary sense of *telos* is “end, term, goal.” The standard view is that this came from a labiovelar *k^wel “wheel, revolve, journey, be, live,” in the sense of “turning point.” It was supposedly represented in Greek by *tel-* and by πέλομαι *pélomai* (H). This verb, meaning “to become, be” is supposed to be an “Aeolicism” in which *k^we irregularly turned to *pe* instead of the common *te*. As it was attested in Homer in the third person of the middle, an equally plausible derivation would be from the medio passive of the Canaanite verb *pʿl* “to make, do,” used frequently in reference to deities. Thus *pelei* or *peletai* would be “it was done or made” rather than “it became.”¹⁵⁶

No one doubts the existence of the root *k^wel and of its presence in such Greek words as *pólos* “axle.” Chantraine, however, questions whether *tel-* belongs to this root. An additional problem is that the Mycenaean title *te-re-ta*, which would appear to be connected to *tele* “services due,” is not written with a *q*. It would be if it were derived from *k^wel. *Tellō*, many of the forms of which have a single *l*, has the same two meanings as *telos* “to achieve, complete, to rise up.”

In fact, a widespread and common Egyptian root can provide a more plausible etymology for *tel-* and *tell* in the sense of “limit” and “complete.” It is *ḏr*, the basic meaning of which is “limit, end.” This form is frequently used concretely in space, as in *ḏr* “obstacle,” *ḏri* “enclosing wall” and *ḏrw* “boundary.” *ḏr* and *ḏrw* are, however, also used more abstractly in such phrases as *r ḏrf* literally “to its end” and meaning “entire, complete.” This function also matches derivatives of *telos* and *tellō* as well as their derivatives such as *teletē* “concerning initiation.” Nb *r ḏr* “lord to the end” was used of gods and kings both spatially and temporarily. *ḏri* “strong, hard” is used in the sense of thorough “to press through to the end.” *ḏr* is used verbally through time to mean “to end up as.” This sense closely resembles that of the Homeric τέλεθω “to come into being, become, be.” The phonetic fit is tightened by the general Coptic rendition of *r-ḏr* as the prepronominal forms of *tēr*. Old Coptic *tēr* and the Fayumic *tēl*.¹⁵⁷

ḏr as “distant limit” also provides a plausible etymology for τῆλε *tēle* (H) “far, distant.” As can be seen above, the first vowel is also uncertain in Coptic. Two different and mutually exclusive hypotheses derive this Greek form from Indo-European: First, because of Boiotian rendering of τῆλε- in such names as Πείλε- and in some Mycenaean personal names beginning with *q-*, Chantraine accepted an original *k^wel and

related it to the Sanskrit *caramá* “extreme.” Second, Szemerényi denied the labiovelar root *k^wel because of the long /ē/ in *tēle*. He proposed a link to an Indo-European root *tāl found in the Baltic *tolì* “distant.”¹⁵⁸

6. √M_{wr}, M₃ʿt Μοῖρα, Μείρομαι
AND MM₃ʿT, Μα

The root √mwr is attested throughout Semitic. In Hebrew, it is “exchange, recompense, wealth.” In Amharic, *märra* is “to distribute or allot land.” South Arabic has *mwr* “frontier.” The Gannan Gurage, or Outer South Ethiopic, languages have *m^wärä* “frontier, limit, brink of precipice.” Rounding of the /m/ in Asiatic Semitic languages is also indicated by the Latin *murus*, earlier *moiros* or *moerus* “boundary wall.” Ernout and Meillet see this word as a loan replacing the Indo-European *dheigh (t’eik’).¹⁵⁹ Thus, it was probably borrowed from an unattested form in Punic. The Amharic *märra* and *mərrit* “distribution of land by the government” indicate another semantic aspect of the cluster also found in the Gannan Gurage *m^war* “individual part, share.”

The form √mwr was not restricted to Semitic; Beja has *mar* “side.” The Highland East Cushitic language Haddiya has *mara’a* “row,” and Central Chadic has *mar “right.” Orel and Stolbova link this last to the Egyptian *m₃ʿt*.¹⁶⁰ *M₃ʿt* is the central concept in Ancient Egyptian civilization and its facets have been treated at length by many Egyptologists.¹⁶¹ Translations include “righteousness, world order, justice and fair share.” A Babylonian transcription of Nb M₃ʿ Rʿ, the prenomen of Amenhotep III, read Nibmuaria. Thus, even after /3/ had lost its consonantal quality the initial *m-* in *m₃ʿ* was still rounded. Previously, it would have been *m^warʿa(t).¹⁶² Given the Greek rendering of rounded consonants by CoiC (referred to in Chapter 5), this would provide an exact phonetic correspondence with Greek Moira (H).¹⁶³ Like *m₃ʿt* in Egyptian culture, *moira* was central to Greek religion and thought and had a vast semantic range. The early twentieth-century British classicist J. B. Bury described its span in this way:

If we were to name any single idea as generally controlling or pervading Greek thought from Homer to the Stoics, it would perhaps be Moira, for which we have no equivalent. The common rendering “fate” is misleading. Moira meant a fixed order in the universe. . . . It was this order which kept things in their proper

places, assigned to each its proper sphere and function, and drew a definite line for instance between men and gods.¹⁶⁴

This is an excellent description of *mʒʹt*.¹⁶⁵

The tight phonetic and semantic fit is not seriously disturbed by the fact that *moîra* belongs to a cluster that the lexicographers put under the heading of **μείρομαι**, *meíromai* (H). The vocalization is easily derived from **moiromai*. In fact, forms with /o/ or /oi/ are much more common in Greek than those with /ei/. Ethiopic Semitic has a frequent interchange between C^wä and Co. The semantic range of the cluster is exactly that of the Afroasiatic *√mw*r “divide, portion, allot, destiny.” There are even specific correspondences, such as **מוֹרָא** (5) in the sense of “parcel of land” or **מֶרֶס** (6) “part, lot, inheritance.”¹⁶⁶

The lexicographers have difficulty in finding Indo-European cognates. A probable parallel with the Latin *mereō* “to receive, portion or prize” would seem more likely to be a borrowing from Afroasiatic, like the Hittite *mar-k-* “to divide a sacrificial victim.” The problem remains to identify from which Afroasiatic language the word came. The probability that *moîra* itself came from the Egyptian *mʒʹt* is supported not only by the exactness of the phonetic and semantic fit but also by the two *mʒʹty*, the dual or doubled form of *mʒʹt*. These two played key roles in the weighing of the dead souls and were sometimes represented as the scales themselves. These functions are strikingly close to those of the Greek *Moirai*. It should be remembered that there were not always three *Moirai*; at Delphi there were only two.¹⁶⁷

The other members of the cluster, as well as the Latin *mereō*, are equally or more likely to derive from Semitic. As such, they could have been borrowed at any time in the Second or First Millennium. By contrast, the transmission from *mʒʹt* or **m^wara(t)* to *moîra* must have taken place before the middle of the Second Millennium when /3/ lost its consonantal quality. Other loans appear to have been made after that time. Pronounced as **ma*, *mʒʹ(t)* appears to have been borrowed again into Greek as *ma*, a particle used in asseverations and oaths. With the preposition *m* as in *m mʒʹ(t)* “in truth” was also used, although not in the same syntactical position, as a marker of oaths—which were used in Egyptian law courts.¹⁶⁸

***Mʒʹ hrw* and *Mákap*.** Two compounds containing *mʒʹ* without consonantal /3/ have had a major effect on Greek. The first of these **dīt*

m3ʿ “to render true, justify,” which appears in Greek in the bundle of words around *tīmē* “honor, reward,” was discussed in Chapter 9.¹⁶⁹ At this point, I shall consider the derivation of the Greek *makar* (H) from *m3ʿ hrw* “true of voice.” *M3ʿ hrw* was the title shouted by the audience to Horus when he defeated Seth in his case brought against him. The title was applied to the virtuous dead who have stood their trial in judgment. The Greek *mákar*, *makária* is usually translated “blessed, happy.” Already, in Hesiod *hoi mákares* were “the blessed dead,” and the μακάρων νήσων *makárōn nēsōn* were the “Isles of the Dead”—the Egyptian dead also lived in the west. In Homer the adjective *mákar*- was generally applied to gods and immortals rather than to mortal men or women. In the fifth century CE *makarites* meant one recently dead just as μακάριος, *makários* does in demotic Greek today. In Greek hagiology St. Makarios is involved in the judgment of souls.

A. H. Krappe, E. Vermeule, C. Daniel and B. Hemmerdinger all accepted the derivation as semantically and phonetically convincing.¹⁷⁰ Both Frisk and Chantraine reject the proposal without stating any reason for their objections or providing any alternative. Richard Pierce attacked the etymology for its “fundamental arbitrariness” and objected that a Greek transcription of *m3ʿ hrw* as -μάχορο -*mákhoro* invalidated it as the origin of *makários*. R. Drew Griffith points out the extreme weakness of this case, especially given the context of the general parallels between the Egyptian and the Greek ways of death.¹⁷¹ Chapter 8 referred to the frequent alternations of /k/ and /kh/.¹⁷² The different vocalizations can be explained by renderings before and after the *ā* > *ō* shift.¹⁷³

7. HPR

Hpr is “to come into existence, become,” the opposite of the rarely used **wnn** “long lasting or permanent existence.” As some of the main Greek derivatives of *hpr* are names of gods, they will be discussed in Chapter 19. Here, we shall look at verbal borrowing, from *hpr* to the indeclinable Greek word ὕπαρ.

Όναρ and Ύπαρ. In Book 19 (547) of the *Odyssey*, a voice in her dream assures Penelope that the previous dream within the dream was not a “dream” *onar* but a faithful *hypar* a “true vision” that will certainly be fulfilled.¹⁷⁴ Later writers, from Pindar to Plato, followed Homer’s statement to make a distinction between the false *onar* and the true and divine *hypar*, which could be relied upon.

In the third century BCE the Alexandrian critic Zenodotos of Ephesos tried to establish a canonical text from all the disparate versions of the Homeric epics in circulation and accepted this traditional distinction. Zenodotos, however, was forced to confront the fact that some lines in the *Iliad* described *onar* and its assimilated form *oneiros* as having divine origins. In Book 2 (6), Zeus sent an “evil dream” οὐλον ὄνειρον to deceive Agamemnon. The *oulon* indicates a need to qualify the *oneiron* sent by the god.

Even more difficult was the well-known passage near the beginning of the *Iliad* in which Achilles suggested, in Book 1 (62–63), “let us seek a seer or a priest [63] or a reader of dreams [*oneiropolon*], for a dream [*onar*] comes from Zeus.” Zenodotos’ solution was to “athetize” line 1:63 or declare it spurious. Modern critics have explained Zenodotos’ action as the result of the line’s containing the compound conjunction *kai gar t(e)*, which occurs elsewhere in Homer only in “two notoriously late passages.”¹⁷⁵ Thus, one emmendation has led to others. It seems to me much more likely that Zenodotos’ objection was to the content of the line rather than its form. An indication that this was the case comes from his removal of ten lines of text (2:60–70) which include Agamemnon’s report that the figure of Nestor in the dream (*onar*) sent to delude him declared, “I am a messenger to you from Zeus.” This line and its earlier occurrence in the original description of the dream (2:26, 34) was also rejected by Aristarkhos, Zenodotos’ fifth successor as tutor to the Ptolemaic dynasty and chief librarian. In the *Iliad* (2:56) and another part of the *Odyssey* (14:495) this dream is described with the same line that refers to an *oneiros* that was *theios* “divine.” These lines were also cut out by Zenodotos and declared to be spurious by Aristarkhos.¹⁷⁶

The most plausible explanation for these contortions is that ancient and modern commentators have suffered from misplaced precision and have wanted to impose the clear-cut distinction between true divine *hypar* and false *onar* made in *Odyssey* 19:547 upon the whole of both epics. In this respect at least, I believe that it is simpler to respect the integrity of the texts and accept that in Homer, *onar* could be seen as coming from the gods but they were sometimes deliberately deceptive.

As mentioned in Chapter 7, claims for an Indo-European etymology for *onar/oneiros* are made on the basis of an Armenian form *anurj* “dream.”¹⁷⁷ Attestations in these two languages can be enough to establish an Indo-European root if the two forms fit the normal sound shifts found in these two branches of the linguistic family and, therefore, can-

not be copies from one language to the other. In some cases, however, as in *oneiros/anurj* no consonantal shifts exist to guide us, so both possibilities are open. Accepting that the two words are related, one has to weigh the probabilities between an Indo-European genetic development, on the one hand, and a foreign copying into Greek and then on to Armenian, on the other. The latter copying is very possible as Armenian is only first attested in the fifth century CE in Christian texts translated from the Greek. Other possible Indo-European cognates for *onar* are the Albanian words for “dream” *ädërrë* and *ëndërrë*. As Chantraine writes, however, this connection is “less clear.”

Another reason for preferring the hypothesis of a copying from Egyptian into Greek is that *onar* was indeclinable—as was its antithesis *hypar* (for which see below). Like some other admitted loans, such as the names of the alphabetic letters *alpha*, *beta*, *gamma* etc., *onar* did not fit into the declension patterns found in all clearly native words.

The most plausible origin for *onar* is from the Middle Egyptian *wn hr* “open the sight of, clear vision.”¹⁷⁸ In Demotic it means “reveal.” The Coptic *ouwenh* was also used as a noun “revelation.”¹⁷⁹ Vycichl reconstructs the Middle Egyptian pronunciation as **wan-háʔ*. This is very close, although there is a slight phonetic problem in deriving *onar* from *wn hr*; in that the shift from a semiconsonant or glide with a vowel **wa-* to the purely vocalic **ou* or **o* is sometimes considered to have occurred after the dropping of final *-rs*.¹⁸⁰ The dates of each of these changes are very uncertain. In any event, a well-known example the semiconsonant becoming vocalized while the final *-r* was retained is in the Greek transcription of the Egyptian divine name *Wsir* as “*Osiris*.” In this case the final was retained because of the archaism in a divine name. In the case of *onar* the final *-r* continued to be written and *wn hr*, too, was a religious or priestly word. All in all, the phonetic problems seem relatively slight.

The semantic case is even stronger. I have argued above that, in Homeric times, whether true or false, an *onar* was believed to be a vision sent from the “real” world of the gods. It is possible that the Egyptian word was influenced by a close homonym to *wn* “open,” *wn(n)* “to be” in an eternal or unchanging sense. All in all, two reasons exist for preferring the explanation that *onar* is a loan from Egyptian: First is the weakness of the Indo-European etymology and the fact that, unlike the hypothetical Indo-European root, the Egyptian one is made up of intelligible units—*wn* “open” *hr* “face, sight.” Second, Greek has another word, *oneiros*, that is declined. This last fact in itself indicates that *onar* is a loan, as it is

generally recognized that the existence of similar though distinct words in the same semantic range is a sign of different borrowings from the same or a changing foreign form. One could deduce this, for example, from the English words candle, chandler, chandelier and candelabra.

To return to the passage in Book 19 (547) of the *Odyssey* and the etymology of the rare word *hypar*: Some scholars have derived it from the preposition *hypo* “under.” The semantic and phonetic implausibility of this suggestion led Frisk to argue that it should be associated with the Indo-Hittite root found in the Greek *hypnos* and the Hittite *suppar-iya* “sleep.” The latter like the Latin *sopor* even has a final -r. Pierre Chantraine, who surveyed the previous discussion, is concerned with the semantic distance between “sleep” and “true dream.” He is not convinced by Frisk’s demonstration of analogous terms found in other Indo-European languages and used in both senses.¹⁸¹

In this case, neither Frisk nor Chantraine consider the possibility of a loan. Nor do they mention the problem posed by the fact that *hypar*, like *onar*, was indeclinable. There is, in fact, a very plausible source for the Homeric term in the fundamental Egyptian term *hpr* “to take place, come to be, come into existence, become.” The semantic correspondence is exact. It would explain the distinction between the inevitable *hypar* and the divine, but possibly deceptive, *onar*. The phonetic fit is good but not perfect. The initial Egyptian /h/ becoming the Greek /h/ might seem to present a problem. The most probable explanation is that the loan took place through Phoenician. /H/ merged into /h/ in Canaanite around the middle of the Second Millennium BCE.¹⁸² The Phoenician shifts /o/ > /u/ and /u/ > /ü/, discussed in Chapter 5, can explain the first vowel in *hypar*.¹⁸³

Dreams and their interpretation clearly played a central role in Egyptian culture especially in religion and medicine. The most frequent word for “dream” in Egyptian is *rswt*, *rasou* in Coptic, which comes from a root *ris* “to be awake.” At times *rswt* is used in the sense of “fleeting illusion.” A dream was also seen as a moment of contact between the world of the living and that of the dead and the gods. In dreams gods show themselves to mortals to convey their divine wishes, indicate a remedy or make a prediction.¹⁸⁴ This is indicated by another Egyptian term for dream *wpt m3’t* “open to maat, truth or morality,” which is very close in sense to *wn hr*. In Egyptian culture, dreams were not always valued positively and bad or false dreams could be wished on others through magic.

Dreams do not occur frequently in the Bible but when they do they

are clearly seen as revelations or predictions.¹⁸⁵ Even less is known about the interpretation of dreams in Phoenicia. There is no reason to suppose, however, that they were very different from those in Egypt. All in all, while there is every reason to suppose that a respect for the veracity of dreams and their function as revelations of the divine was native to Greek culture, there is also no doubt, given the heavy influence of Egyptian religion on that of Greece, that the terms *onar* “dream, revelation of reality” and *hypar* “what will happen” both appear to have originated in Egypt.

CONCLUSION

The derivations of *hypar* from *hpr*, *moîra* and *ma* from *m3' t* and *tīmē* and *makários* from **dit m3'* and *m3' hrw* are overwhelmingly likely. So too is the derivation of *mythos* from *m(w)dw*. The proposed Egyptian etymology for *tēle* is merely competitive, but those of *tēlos* and *tēllō* and their many derivatives are far superior to the proposed Indo-European etymologies. Each of the earlier sections also contains stronger and weaker Egyptian etymologies: *xanthos*, *kántharos* and *kátharós* and *brenthos* are obviously stronger than *Kynthos*, *Kentauros* or *penthos*. Similarly, *sophía* is much the most likely of the derivatives from *sb3*. Even the weaker ones, however, are plausible in the absence of challengers from Indo-European. Furthermore, it should be borne in mind that each Egyptian and Semitic loan or copy that is accepted makes the next proposal more likely.

CHAPTER 11

MAJOR EGYPTIAN TERMS IN GREEK

Part 2

This chapter is concerned with just two Egyptian terms: First, *nfr(w)* “good, beautiful” with the additional meanings of “zero, base line.” Second, *ms (i)* “child, giving birth.” Both are central to Egyptian culture and had major and intertwined ramifications in Greece. These ramifications require considerable detailed attention.

NFR(W)/MS

Nfrw

The two Egyptian terms are linked in this section because of the intertwining of nymphs and Muses in Greek mythology. Before considering these together, however. I shall turn to *nfr* and the Greek *nephroí* “kidneys.” Pokorny, supported by Ernout and Meillet, attempted to link this form to a stem *neg^uh-rós “kidneys, testes” found elsewhere in the Germanic *nior* “kidney.” Chantraine, not happy with what he saw as a hypothetical *neg^hw injected a note of caution pointing out that Indo-European contains many different roots for these organs.

The only words that are clearly related to *nephroí*, are the Latin *nefrendes* and *nefrōnes* and *nebrundines*, words from the dialects of Praeneste and Lanuvium. All of these mean “kidneys” and possibly “testes,” *Nefrendes* has another meaning, that of “suckling pig.” This suggests a larger

semantic field of “tender morsel.” Ernout and Meillet pointed out that these words look foreign and indeed a loan from *nephroí* would seem quite plausible.

According to Horapollon’s description of hieroglyphics, written in the late fifth century CE the sign for “good” was written with a “heart and a windpipe.”¹ His judgment has been accepted by modern Egyptologists who explain the ideogram or trilateral sign *nfr* 𓂏 (F35) in this way. It is impossible to say whether the relationship between the sign and the word was real or merely punning.

This still does not link *nfr* “good, beautiful,” to *nephroí* “kidneys.” The totally different Egyptian name for these organs is *ggt*. The connection comes from specialized meanings of *nfr* “zero” and *nfrw* “ground level, base line,” demonstrated by the historian of mathematics Beatrice Lumpkin.² In a fascinating note, the Egyptologist Rosalind Park examined the problem of why during mummification only the heart and the kidneys were kept in the body after the other organs had been removed. She demonstrated that the kidneys were identified with the constellation Libra “the scales.”³ They were seen as the wise and balanced counsellors of the monarch, the heart. She illustrates their position on the Old Kingdom artistic grid system in which the base of the scales is on the mid-point of the canonical drawing of man, hence on the *nfrw* of the grid.⁴ Thus *nfrw* signified both kidneys and perfect harmony.

I referred to *nfr(w)t* “beautiful young women” in Chapter 9.⁵ As a cattle-herding people, however, the earliest Egyptians saw real beauty in cows. Hathor the goddess of beauty was represented as a cow, and the epithet *βοῶπις* “cow-faced, cow-eyed” was applied to many Greek goddesses and beautiful women. Thus, it is not surprising to find a term *nfrt* for cattle. In Chapter 3, I noted that paintings in the Sahara represent bicolored cattle, indicating deliberate breeding; admiration for dappled cattle continued throughout Ancient Egyptian culture.⁶ In Greek the dappled fawnskins worn by initiates of the rites of Dionysos were called *νεβροί* (H). Chantraine confidently sees the Armenian *nerk* “color” as cognate. Given the association with dappled skins and Egyptian influence on Dionysiac cults, this etymology is far less precise semantically than that from *nfr*. Frisk pushes absurdity still further by proposing to link it to the Latin *niger* “black.”⁷

Moses and Moschos

In detailed artistic representations, the biliteral hieroglyph *ms*  (F3 1) is of foxtails tied together. Information from the Sahara and Berber iconography strongly indicates a more fundamental meaning; that of water dividing and pouring into different channels necessary to fertilize the fields.⁸ Such imagery is appropriate for the breaking of the waters at birth see *msi*  (F3 1, S29, B3) “childbirth.” The vocalizations of the cluster of Egyptian words concerned with birth, written *ms*, are varied and complicated. To give birth was *mise* or *msi* in Coptic. In names denoting “son, child of” the vowel was rendered /ā/ in Middle Babylonian and /a/ by Herodotos but /ō/by Manetho.⁹ In this case, however, there was probably a rounded *m^wa*. In many Gurage languages *m^wäs(s)a* meant “calf, young.” In Central Chadic the cognate of the Egyptian verb *ms* “give birth” is *m^was*.¹⁰ Despite the fact that **ms* never appears alone in Egyptian names, it is generally acknowledged that the Hebrew name Mošeh derived from the Egyptian *ms*. The regular Hebrew correspondent of the Egyptian /s/ is /š/. The Greek **μόςχος** (H) has the general meaning of “young” and the specific meaning “sprout, shoot.” Frisk and Chantraine see this as Indo-European, citing the Armenian form *mozi* “calf” to construct a root **mozgho-s*. It would seem to me that *mozi* is more likely to be a loan from Semitic and that *móskhos* derives from a Phoenician form **mošeh*, corresponding to the Egyptian *ms* “calf, young animal,” the Coptic *mase* (S) *masi* (B).¹¹

NFR/MS

Muses, genii, nymphs and Muses again

MUSES AS DAUGHTERS. At this point I should like to consider together the Greek reflections of the two Egyptian roots *nfr* and *ms*. I shall try to show that the Greek Mousai or Moisai like Mošeh all derived their name from the Egyptian root *ms*. The search, however, will take us far beyond linguistics into an iconographical, mythological and literary investigation of the origin of nymphs and young spirits of childbirth and providers of nourishment.

The Indo-European etymologies suggested for the name Muse are derived from a hypothetical **Mont-ya*. This could mean “nymph of the mountain” (*mons montis*). It is true that the Muses or Musai were often

associated with mountains but *mons* is a Latin and not a Greek word, which makes the semantic case as weak as the phonetic.¹² Another possibility is that *Mont-ya was connected to the Indo-European root *men “mind.” As the Muses were patrons of the arts and their mother was called Mnemosyne “memory,” this would be possible semantically, but there are phonetic problems in that *men* is a long way from Mousai.

I shall argue below on iconographical grounds that the borrowing of Mousai goes back to the Middle Kingdom. Thus, the simplest etymology for Mousai is from an Egyptian *m^wes. This would explain the Aeolic form Μοῖσα, the Dorian Μοισᾶγέτα “leader of the muses” (Apollo), and the Septuagint Μουσῆς, Moses. Semantically, the case for deriving Musai or Moisai from *ms* is almost equally good. The early poets laid great stress on the Muses being daughters or children of Zeus. The final lines of Hesiod’s *Theogony* read

Now sing of women, Muses you sweet-voiced
Olympian daughters of the aegis-bearing Zeus.

Similar references to the Muses as daughters of Zeus are repeated in the second book of the *Iliad*, which contains some of the most ancient material in the epics.¹³

PREGNANT HIPPOPOTAMI. A further and deeper reason why they were called Musai may be because of a connection not merely with *ms* 𓄢, 𓄣 (F31, A17) “child” but also with *msi* “childbirth.” While the Muses were not simply Egyptian goddesses transported to Greece, we shall see that they did have precedents in Egyptian cults surrounding childbirth.

As early as the *Pyramid Texts* inscribed in the Fifth Dynasty, but containing passages that date back to the Fourth Millennium, there is a reference to a goddess ʾIpy, who is called on by the dead pharaoh to suckle him with her divine milk: “O my mother ʾIpy, give me this breast of yours, that I may apply it to my mouth and suck this your white gleaming sweet milk. As for yonder land in which I walk, I will neither thirst nor hunger in it for ever.”¹⁴ No representations of ʾIpy exist from this time. This is not surprising as the name seems connected with a root *ip* or *ip3* meaning “secret or private space” and *ipt* “harem”—childbirth took place in retreats or restricted rooms. It is very likely, however, that even by this early period ʾIpy was seen as a standing hippopotamus, as such a creature already appears on amulets and scarabs of the late Old Kingdom and First Intermediate period.

Scholars have speculated as to why the hippopotamus should have symbolized childbirth. One idea is that the animals were thought to give birth painlessly and to protect their young with great ferocity. This fierceness and the animals' well-known bad temper might have made it necessary to appease the most dangerous spirit, rather as the jackal god Anubis was seen as protector of the dead.¹⁵ Another factor may simply have been a perceived physical resemblance between hippopotami and pregnant women.

By the beginning of the Middle Kingdom, it is clear that Ḥpy or the feminized form of her name Ḥpt, "wet nurse, midwife," was represented in this way. Another goddess Rrt had the body of a standing hippopotamus with lion's limbs and a crocodile head. She, like Ḥpt, was seen as a protector of women in childbirth. Rrt also had astronomical functions and was associated with Nwt, the goddess of the sky and mother of the gods. Rrt as a standing hippopotamus with a crocodile on her back was seen as a northern constellation, the controller of the Great Bear.¹⁶

Some male deities also had a similar appearance. These, like the females, were associated with purification by water, especially purification of the dead. Such processes, like the divine inauguration of pharaohs, were seen as parallel to childbirth. Amulets in the form of beads with approximations of the design of the standing hippopotamus are found exclusively in the graves of women and children, presumably in connection with death in childbirth as well as rebirth into immortality. The design, however, was used on other objects during the Middle Kingdom, notably boomerang-shaped magic knives or wands. On these, etchings of standing hippopotami holding large knives were strongly represented among other gods and demons. Thus, the hippopotamus divinities were not only the goddess herself but also her smaller demons or helpers.¹⁷ It is clear from tomb paintings that these wands were used at childbirth and also for the resurrection of the dead.

Many of the standing hippopotami show what is called a "dorsal appendage," that is to say a long striped worm-like object. By the Twelfth Dynasty, crocodiles replaced the worms or were added to them. The image of a hippopotamus with a crocodile on her back brought together the two most powerful and dangerous forces of the river. Later in the Middle Kingdom, the figures developed more characteristics of the lion, and by this time the hippopotamus-lion-crocodile figure had begun to be known—presumably because of the great fear she inspired—as the T3 Wrt, "the Great One" or Thueris to the Greeks.¹⁸

GOD OF BIRTH. In the Middle Kingdom Thueris was frequently placed together with a companion the god Bēs, a mysterious divinity of music and rebirth, who was portrayed as a negroid dwarf or pygmy but also had leonine features. He was known as “the Lord of Punt” or “Master of Nubia” and, therefore, was associated with central Africa.¹⁹ The mythographer Mircea Eliade maintained that a close relationship linked initiatory circumcision and death. He saw the former in “Africa” as having been carried out by men dressed as lions or leopards.²⁰ Eliade’s “Africa” is ill-defined, although it must be restricted to those largely Afroasiatic-speaking societies in which circumcision is practiced. The anthropologists Maria Stracmans and Anna Montes point out that the practice continues in a number of African cultures where the initiates are stripped and painted white, the color of corpses, and humiliated with jokes and ribaldry.²¹ Even though the surviving Ancient Egyptian illustrations of circumcision are much more prosaic, the Egyptian rituals, jokes, ribaldry, and initiation were central to the character and cult of Bēs.

The /s/ with which Bēs’ name is usually written, 𓂏 , was etymologically a voiceless dental fricative /s/. By contrast, the hieroglyph 𓂏 was originally a voiced /z/. The two phonemes merged as /s/ in the Middle Kingdom. As the name Bēs is only attested from the late New Kingdom its earlier pronunciation is uncertain. Takács writes about this: “etymology risky due to the unknown OEg sibilant.” Taking it as the unvoiced sibilant, he prefers as an etymology the tenuously attested parallel word *bs* “orphan, foundling.” The semantic connection with Bēs requires some convolutions.

If, on the other hand, one posits that the early form was *bz there are many fruitful links with other Afroasiatic roots. Before discussing these, it is necessary to consider other words attested in Middle Egyptian that are written *bs* with uncertainty as to which s (*s*>*s* or *z*>*s*) to use. *Bsī* was “to flow or spring forth” (of water) and medically “to swell, bodily discharge.” *Bsʕ* was “to protect,” and in the phrase *mw bsʕ* “water of protection” it was mother’s milk.²² All these have strong connotations of physical birth. By itself, however, *bs* meant “to introduce someone into, install as king, initiate, reveal a secret to.” It also meant “secret” itself.²³ Furthermore, these may also explain the origin of the first element of the cry made at the moment of initiation at Eleusis, $\pi\acute{\alpha}\xi\ \kappa\omicron\gamma\chi$. *pax kongx*.²⁴ This extensive cluster fits with Bēs’ cultic role as the personification of birth, rebirth, protection and initiation. Bēs was most popular in the

Late Period but the linkage of his cult with that of Thueris goes back to the Middle Kingdom.²⁵

Accepting the original consonantal structure of the name as *Bz, we are left with the problem of vocalization. Ehret sees a cognate for *bz* “reveal” in a Proto-Cushitic form *beez.²⁶ However, following regular sound shifts the Late Egyptian Bēs would have been *Būz in earlier Egyptian. Interestingly, this path brings us close to B^wāžžā, the lightning god of the pagan Gurage, and the Cushite deity Bazō. The phonological parallels are matched geographically, Bēs allegedly came from Nubia and Punt, the general region in which B^wāžžā/Bazō has been worshipped. Nevertheless, the natures of the two divinities are very different. As far as I am aware, B^wāžžā/Bazō seems unlike Bēs and is far closer to the Egyptian Min, as a god of thunder and phallic fertility.²⁷ He has no concern with human birth, initiation and death, or lions.

In this connection and in light of the leonine circumcisers referred to above, it is interesting to find a phonetic *bz representing the head or neck (or mask?) of a lion or equid. This parallels lion masks used in modern African circumcision rituals.²⁸ For this Takács finds Agau cognates of *bēdz^wə* “leopard, panther” and *abza* “lion.”²⁹ He provides examples of Cushitic, Semitic, Berber and, possibly, Omotic cognates of *bz as “reveal.” Takács plausibly sees *bz “secret” as possibly coming from the same root, although it may be related to Chadic forms *b-z “envelope.”³⁰ In short, Bēs was the god of birth and initiation and the secret ceremonies surrounding them.

THE CRETAN “GENII.” In the Aegean, the terms “genius” and “daemon” have described frequent representations of a type of fantastic creature that has been seen to combine features of wasps, lions, pigs or donkeys. By 1890, scholars had suggested a derivation from Thueris, and within a few decades Arthur Evans was able to demonstrate a clear iconographic trail that led from First Intermediate period or early Middle Kingdom Egyptian representations of T3 Wrt/Thueris as a hippopotamus with crocodile skin on her back to the many “genii” from the Bronze Age Aegean.³¹ In the last few decades, some have tried to deny this derivation but these attempts have been thoroughly refuted. Now no doubt exists about the iconographic or pictorial connection.³²

When did the figures first arrive in Crete? The earliest example is on a scarab found in a tholos tomb at Platanos in the south of the island. Scholars differ as to whether the scarab is Egyptian or a Cretan imitation.

If it is Egyptian, the question is whether it comes from the First Intermediate period or the Twelfth Dynasty. The date of the tomb in which it was found is also controversial; it ranges from Early Minoan III to Middle Minoan III.³³

This particular scarab was probably not the first to arrive on the island. Nevertheless, as with the bull cult, Thueris probably arrived in Crete just before the establishment of the palaces as part of the cultural package from southwest Asia and Egypt that transformed the social and political life of the island. This transformation came in the Eleventh Dynasty, precisely between the two periods proposed for the “first” scarab. In any event, the Platanos scarab and the imprints of seals in the palaces at Phaistos and Knossos clearly show that the figures were current and widespread in Crete during the Old Palace period. It is equally evident that the motif spread from Crete to Cyprus and mainland Greece in the Late Bronze Age.

Today, conventional wisdom accepts the iconographic derivation but there is much more skepticism about any relationship between the meaning and function of Thueris and the Aegean *genii*. The art historian Margaret Gill utterly denies any link. Walter Burkert is more judicious but gives the same impression, “Iconographically they are to be linked to the Egyptian Hippopotamus Goddess Ta-Urt, the Great One, who wears a crocodile skin on her back, but neither the multiplication of their figures nor their servile function can be derived from the Egyptian.”³⁴ As mentioned above, both the multiplication and the servility are evident from the early Middle Kingdom.

ACKNOWLEDGED FUNCTIONAL PARALLELS BETWEEN THUERIS AND “GENII.” Conventional views on the “*genii*” and their relationship to Egypt are set out well by the isolationist art historians Roland Hampe and Erika Simon. As they see it, the “genius” is

A creature . . . [that] belongs partly to the animal kingdom, partly to that of humans and gods. . . . it appears in isolation or with its fellows, in the service of a deity, brought under control by one, or else taming or killing of wild animals; it can even be an object of cult. This creature has correctly been described as a demon, since it corresponds to a surprising degree to a the Platonic definition of Demonic as something intermediate between gods and men. . . . It is certain that the Mycenaeans took the idea from Crete and the

Minoans were led to their representation of it by the Egyptian hippopotamus goddess Ta-urt, who walks on her hind legs. . . . The white colour of the demons . . . indicates that they are female . . . it need cause no surprise because iconographically they are derived from an Egyptian goddess.³⁵

Here, then, is a concession that gender, one of the Egyptian deity's most salient characteristics, had been transmitted. The latest work on the subject suggests that other characteristics also spread. One instance sometimes given as a purely Aegean development is that the genii were associated with ewers and pouring water. Plausibly, this development has been described as the result of a cultic adaptation to a rainfall climate. The archaeologist of Crete, Judith Weingarten, has shown, however, that in the *Coffin Texts* of the Middle Kingdom—as is entirely appropriate for a hippopotamus—Thueris was associated with the waters of heaven: “that is, the waters of Nun, primeval ocean. The hippopotamus demon comes to personify the watery chaos from which the world was formed and these waters are transformed into the waters of lustration and purification.” Weingarten also points out that in the Middle Kingdom, women were ritually cleansed fourteen days after birth. She sees Thueris as a divine nurse associated with this procedure. It seems to me that Thueris, as the primeval waters, represented not only the waters that cleansed women after childbirth but also the waters and blood of childbirth itself. Nevertheless, Weingarten rightly focuses on the purification.³⁶

From the early New Kingdom, hollow statuettes of Thueris were made with breasts perforated to let liquids escape drop by drop. These were used to sprinkle lustral water or milk. Basins of purification are also dedicated to Thueris. Weingarten points out that Thueris presided over rites in which pure water was poured over a kneeling priest into a basin. Although these rites are only attested in the New Kingdom, she maintains that passages from the *Coffin Texts* indicate that such rituals and basins can be traced back to the Middle Kingdom.³⁷

Another characteristic of the Aegean genii is hunting. Here too Egyptian precedents seem to exist. In Middle Kingdom representations Thueris carries a large knife and attacks and slays the enemies of Horus and Ra. Weingarten writes about this: “[Thueris] carrying animal victims to sacrifice may be a Minoan extension of her devouring or decapitating the enemies of Re. This does not deny her female gender, but signals a func-

tional ambivalence in her very nature, an ambivalence already clearly attested in Middle Kingdom Tawaret [Thueris].”³⁸

DEMONS. The term “demon,” also used for these figures, is unnecessarily imprecise. Linguists like Pokorny and classicists like E. R. Dodds have claimed that the word **δαίμων** (H) came from the root *δαίωμαι* “divide, apportion.” Hence, it was the “divider” or “master.”³⁹ Martin Nilsson however, believed that the *daimōn* was originally not only intermediate but also impersonal “a mere manifestation of power.”⁴⁰ Such an interpretation suggests the Canaanite root *dmh* “resemble” and the attested form *dīmōn* “divine manifestation.”⁴¹ This, of course, is the central meaning of the Egyptian *kꜣ*. According to Plato, a *daimōn* was a special being obtained by a person at birth that continues to watch over him or her.⁴² Walter Burkert points out that Plato’s view came from an earlier tradition.⁴³

Given this origin, it is not surprising that the Greek concept of the demon was very vague. Demons were certainly not only females. Thus, the term would not seem suitable for the *genii*. I believe that one can be rather more precise about the *genii*. The best way in which to approach this problem is to look at a particular representation of the *genii* on a large gold ring found at Tiryns near Mycenae dating from the sixteenth or fifteenth centuries BCE. On the seal, four *genii* carry ceremonial libation jugs to a seated divinity or monarch, who is holding a large vessel. Behind the throne is, as Hampe and Simon put it, a “heraldic creature—a hawk or a falcon.”⁴⁴ This version has the typically Aegean adaptation with a twisted or wry neck of the hieroglyph  (G7). This hieroglyph is made up of  (G5) “falcon” or the god Horus and  (R12) “standard for carrying religious symbols.”⁴⁵ In the Old Kingdom  was a sign for Horus and it remained predominantly associated with that god. By the Middle Kingdom, however, when the symbol would have been introduced to the Aegean it was used more widely for any deity. So on the Tiryns ring the representation could merely signify “divinity” with a possible pointer to Apollo, who was the counterpart of Horus. Nevertheless, although there is some uncertainty about this, the figure on the Tiryns ring appears feminine and, so, could likely be Apollo’s twin sister Artemis. This identification is strengthened by the fact that in the Old and Middle kingdoms  was used as an alternative for  (R13) the determinative for *imn(t)* “west.” Further arguments for this will be given in Chapter 19. At this point I merely note my conviction that,

while the name Apollo comes from Ḥpr̄—the scarab god of the rising sun—that of Artemis derives from the Egyptian, or Aegypto-Aegean, *Ḥrt Tmt, the feminine form of Ḥr Tm, the god of the evening sun.⁴⁶ In any event, Artemis was the goddess of the evening sun and we know that her name dates back to the Bronze Age since A-te-mo appears on Linear B tablets. Thus, a sign for “the west” strongly suggests that the seated figure is Artemis.

The Egyptian sign imn, mentioned above, also suggests the Cretan city of Amnissos. This place-name appears to come from the Egyptian imnt “west” and is attested in the fifteenth century BCE and possibly a thousand years earlier than that.⁴⁷

Such an identification of the enthroned figure with the goddess of hunting would fit very well with the hunting activities carried out by genii on other seals and paintings. Thus, the female genii associated with watering and hunting could be the prototypes for Artemis’s nymphs.

NYPHS, LILIES AND BEES. The derivation of the Greek *nymphai* from the Egyptian *n3 n(y) nfr(w)t* “the beautiful young people/women,” was set out in Chapter 9.⁴⁸ Crete had many traditions of pairs of nymphs sheltering and rearing the infant Zeus or Dionysos. These tales appear to parallel those of Isis and Nephthys who bury, mourn for and revive Osiris. Two of these nymphs were Ida and **Ἀδραστεία**. The latter name can be plausibly derived from *Ḍrt ndst* “lesser kite,” a title of Nephthys. These two nymphs were supposed to have been the daughters of Melisseus “honeymen.”⁴⁹ Thus, they were in some ways “bees” (seen as female in antiquity) or wild women who ranged the mountains while producing nourishment.

The actual and metaphorical sweetness of human milk has been noted in many cultures, and we have seen above its use in the *Pyramid Text* about ʾIpy. Honey placed on sores and wounds played an important role in Egyptian medicine.⁵⁰ This practice suggests a connection between honey and immortality since Egyptian thought traced a parallel between recovery from sickness and rebirth after death. As a well-known poem from the Middle Kingdom text, “Dispute between a Man and his Ba,” puts it movingly:

Death is before me today
 (Like) a sick man’s recovery
 Like going outdoors after confinement.⁵¹

Both the Egyptian medicinal use of honey and the relation to immortality appear to be reflected in the *Iliad*. Near the end of that epic when Achilles is mourning the death of his beloved friend Patroklos and is afraid his flesh will rot, his mother Thetis reassured him and “on Patroclus she shed ambrosia and ruddy nectar, through his nostrils, that his flesh might be sound continually.”⁵² This mummification—in Egypt preservatives were introduced through the nose—relied on the two substances that provided sustenance to the gods. The word νέκταρ comes from the Semitic reflexive participle of the verb $\sqrt{\text{qtr}}$ “fume, waft upwards as smoke or vapor.” The Greek *néktar* refers to perfumed or smoked wine, possibly even distilled, hence, “immortal” liquor.⁵³

The Greek word “ambrosia” simply means “immortal.” In the Homeric epics the sacred substance was used to counter putrefaction of both living and dead flesh. In this it was used in the same way as honey in Egypt. In Greece it was seen first as food or fodder for the gods and their immortal animals and later as their drink. Modern scholars tend to see ambrosia as having been an idealized form of honey.⁵⁴

In the Aegean, then, honey nourished infants and the dead and other newly inducted immortals. A specific Egyptian parallel to the Cretan honey-givers can be seen in an adoration of the sky goddess Nut who arches over the dead in their coffins and who, it will be remembered, was associated with the hippopotamus/crocodile goddess Reret. Nut’s Greek counterpart was Rhea, the mother of the gods, who sheltered and nourished her son Zeus on Crete. Other reports say that the young Zeus was fed by bees.⁵⁵ A prayer to Nut in the *Pyramid Texts* reads, “Oh Nut you have appeared as a bee . . . Oh Nut cause the king [Nsw] to be restored so he may live.”⁵⁶ There is a pun here in that, as mentioned earlier, *bit* meant not only “bee and honey” but also “king of Lower Egypt.”⁵⁷

MORE CRETAN NYMPHS AND HONEY. Now let us return to bees and honey in Crete, which lies at the junction of Levantine, Egyptian and Aegean cultures. Another nymph who nourished the young Zeus was Ἀμάλθεια *Amáltheia*, whose name may well come from 𐤀𐤎𐤕𐤓 *imʾt* “female ibex” with the divine suffix *-theia*.⁵⁸ *Amaltheia*’s magic horn of plenty was sometimes filled with honey. Bronze Age evidence indicates that honey also figured in the cult of Eileithuia (*Eileithyia*), the Aegean goddess of childbirth, at Amnisos. A tablet from Knossos reads:

Amnissos: one jar of honey to Eleuthia [Eileithyia],
 One jar of honey to all the gods,
 One jar of honey. . . .⁵⁹

Eileithyia, and the many variants of the name, would seem to come from the Semitic [>]E/iltu or * [>]Elat attested in Akkadian, Ugaritic and Phoenician; it simply means “goddess.” Thus, like T3 Wrt (Thueris), Eileithyia would seem to be a cover name for a goddess of such power and menace that her real name would be too frightening to utter. Eileithyia frequently appears in the plural—Eileithyiai—and it is clear that, like Thueris, the Aegean goddess of childbirth had many female helpers.

The association of Eileithyia with Amnissos, as indicated on the tablet, continued for more than a thousand years. The earliest reference to Amnissos is in an Iron Age text: in the *Odyssey* Amnissos is the site of a cave of Eileithyia.⁶⁰ According to Kallimakhos’ *Hymn to Artemis*, Artemis was the divinity of childbirth.⁶¹ Kallimakhos was a high official at the great library at Alexandria and was known for his pedantic statement “nothing unattested do I sing.”⁶² In this case, his claim is confirmed by inscriptions found in many places where the cult of Artemis represented or had assimilated that of Eileithyia the goddess of childbirth.⁶³ In another poem for the seventh-day celebration of the birth a little girl, Kallimakhos wrote:

Artemis (who dost haunt) the Cretan plain of Amnissos . . .
 wherefore accept gentle goddesses, this earnest
 request . . . Muse, I will sing for the little maid.⁶⁴

These lines touch on many themes of this chapter. Artemis’s association with Amnissos is referred to again in Kallimakhos’ *Hymn to Artemis*:

Give me sixty daughters of Okeanos for my choir—all nine years
 old, all maidens yet ungirdled, give me for handmaidens, twenty
 nymphs of Amnissos . . .⁶⁵

Pausanias wrote, “The Cretans think that Eileithyia was Hera’s child born in Amnissos in the country round Knossos.”⁶⁶ The connections among Eileithyia, Artemis and Amnissos are even more interesting in the light of the seal on the Tiryns ring discussed above.

Let us now return to the offering of honey to Eileithyia at Amnissos. Greeks of the Dark and Archaic ages undoubtedly associated nymphs with bees and honey. Five small thin golden plaques, from late seventh

century BCE Rhodes show figures whose top halves are off-Egyptian nymphs and whose bottom halves are those of bees or wasps. The bottom portions matched by wings above the nymphs' heads. From the same period similar wings hover above the Mistress of the Animals, generally associated with Artemis. She holds a lion by the tail in each of her hands. The pattern on her skirt suggests that she is both a woman and a half bee. Hampe and Simon write about the Rhodian "bee nymphs":

The bee is rather to be placed among the entourage of mother-goddesses, such as Demeter and Rhea, and for that reason in Crete it was regarded as one of the nurses of the infant Zeus; this ancient Minoan myth must still have been alive in Crete in the seventh century, for bees are often used as decoration on Cretan vases. Finally, in the Greek oral tradition *melissai* [bees] was a general term for nymphs, whose characteristics as pure, nourishing and prophetic beings were equated with those of bees. . . . as far as the gold sheets are concerned it is best to speak of *melissai*. If these sheets were made primarily as ornaments for the dead—for which their thinness and lack of granulation might serve as arguments—they might supply another element for Greek beliefs about bees; people were convinced that bees emerged from the bodies of the dead and therefore saw in these creatures symbols of immortality.⁶⁷

The idea of bees swarming in carcasses comes in legends about Aristaios, the son of the nymph Kyrene, the eponym of the Libyan city. Aristaios supposedly invented bee culture and other forms of agriculture. He was seen as a son of Apollo and all the stories about him involve nymphs. According to Pindar and Virgil, Aristaios' mother instructed him to sacrifice four young bulls, four heifers and, later, a calf and a ewe to propitiate the spirit of the musical hero Orpheus. On the ninth day after the first sacrifice, he returned to find a swarm of bees coming from the rotting carcasses. He put the bees in a hive and began apiculture or the domestication of bees.⁶⁸

This story is, of course, similar to that of Sampson, who killed a young lion and came back days later to find bees swarming in the carcass.⁶⁹ This part of the biblical story has been modified so drastically for narrative purposes that it is difficult to make mythological sense of it, although the elements are clearly significant. The legend of Aristaios, however, clearly links the emergence of bees to the recovery of Orpheus from Hades and, as Hampe and Simon suggest, to immortality. Given the

emphasis on childbirth and nursing seen above, I believe that one can go further and specify that the Melissai or bee-nymphs were symbols of rebirth.

One of the most famous passages in Greek poetry on nymphs was written many centuries before the Rhodian ornaments were made. In the *Odyssey* Homer described the Cave of the Nymphs in Ithaca: "At the head of the harbour is a long-leaved olive tree, and near it is a pleasant shadowy [misty] cave sacred to the nymphs that are called Naiads. Therein are mixing bowls and jars of stone and there too bees store honey."⁷⁰ Not only does this passage associate nymphs and bees, but it also has essential characteristics of nymphs that point straight back to the cult of Thueris in Egypt. Naiad means "pourer." As we have seen above, this aspect of the cult of Thueris is also associated with stone jars and basins. The striking similarity between this cave and the scene depicted on the Tiryns ring will be discussed below.

BEE STINGS. The "gentle goddesses" in Kallimakhos' poem seem to point to the genii. Bees, however, not only make honey; they also sting. This aspect too fits the divinities of childbirth. As Homer put it in the *Iliad*: "When the sharp dart striketh the woman in travail, the piercing dart that the Eileithyai, the goddesses of childbirth send even the daughters of Hera, that have in their keeping bitter pangs."⁷¹

The term for travail or labor in this passage is a form of the word **ὠδῖς/ὠδῖνος** with the root *ōdín-* and *ōdín* "pain" usually of childbirth. The similar word **ὀδύναι** *odýnai* (H) had the more general meaning of "pains." The English "anodyne" comes from this word. Then there is **ὀδύρομαι** *odýromai* (H) "to let out cries of pain, lament." Frisk supposes *odýnai* to come from the Indo-European root **ed* "eat" in the sense "bite." Chantraine is more attracted to the Armenian *erkn* "pain of childbirth" and proposes a root **ed-won* or **ed-wen*.⁷² The variation of words associated with the pains of childbirth suggests a loan rather than a derivation from PIE. Egyptian has a cluster of words written as *wdn* "to be heavy, become difficult" but also "to install as god or king, make offerings, especially libations."⁷³ Thus, this cluster signifies to give birth, either to life or to immortality. The idea of pouring over or flowing out of liquids suggests both vegetable and animal birth.

In this case, the Greek words help us understand the semantic field of the Egyptian, illustrating, yet again, how difficult it is to understand any of the great civilizations of the Bronze Age eastern Mediterranean without taking the others into account.

ARTEMIS AND KYBELE. One of the seven great wonders of the world, proclaimed during the Hellenistic period, was the huge magnificent temple of Artemis at Ephesos. In antiquity, Ephesos—on the west coast of Anatolia south of Izmir—was a meeting point of the Greek and the local Lydian cultures. The temple for which the city became famous was dedicated both to Artemis and to the Anatolian goddess Kybele, who assimilated Artemis there. The two goddesses were not totally different in their original characteristics or in their origins; both show strong Semitic and Egyptian associations. Both were goddesses of hunting and wild places as well as of fertility. Both demanded human sacrifices and exercised power over men. Greek myths report men blinded for having seen Artemis and her nymphs bathe naked, while priests of Kybele castrated themselves in ecstasy and offered their bleeding genitals to the goddess.

The priestesses of Artemis of Ephesos were known as Melissai. The earliest coins of Ephesos, struck in the late seventh century BCE, symbolized the city with a bee. Even the famous statues of the Ephesian Artemis, in which her body is covered with breasts, seem to be idealized representations of queen bees, whose bodies contain food for the whole colony. A bee itself is represented on the statues just above her feet.⁷⁴ Not only the Ephesian Artemis was seen as a bee. The Boiotian poet Pindar in the sixth century BCE described Artemis as a bee for her chastity and cleanliness.⁷⁵

WASPS AND SPHINXES, APOLLO AND ARTEMIS. Thin waists may only indicate a creature's youthfulness but, while the lower halves of the genii resemble bees, they look even more like wasps, insects with the sting of bees but no honey. In this aspect of their representation, too, there may have been symbolic or religious significance. The Greek word for "wasp" is σφήξ, σφήκος (H). Possible Indo-European derivations for this word have been presented but remain uncertain. Whether or not there is a direct etymology, and I believe there may well be, the word closely resembles σφί(ν)ξ, σφι(ν)κος "sphinx." In the classical period "sphinx" was related to σφίγγω "squeeze, strangle" and the Egyptian monster was thought of as "the strangler."

As part lion, however, a sphinx would also be likely to chase and pounce with sharp claws. The Egyptian word for sphinx is *šspw*, a general word for "statue, image" written with a sphinx determinative. Since the 1920s, it has been widely accepted that the Greek *sphí(n)x-sphí(n)kós* derives from **šspw nḥ* "living image."⁷⁶ Thus, *sphḗx*, is more likely to come from *sphí(n)x*, than vice versa.

The Egyptian origins of their names and of many attributes of Apollo and Artemis will be discussed in Chapter 19 below, as will their associations with solar and leonine cults and the Great Sphinx. To the extent that they can be gendered, the early Egyptian sphinxes were male, in the late Second Millennium, however; sphinxes were increasingly represented as feminine all around the East Mediterranean.⁷⁷ No doubt Artemis was associated with winged sphinxes; see, for instance, the winged sphinx found at her temple at Ephesos.⁷⁸ She was frequently represented beside, or holding, lions or was seen as a lion itself. Her leonine qualities are clearly linked to both hunting and childbirth. In the *Iliad*, Homer has Hera revile Artemis, “it was against women that Zeus made thee a lion and granted thee to slay whomsoever of them thou wilt.”⁷⁹

Like, or rather as, Eilethia, Artemis was the killer of women in childbirth. This idea is not so surprising when one considers the goddess’s identification with wild animals. She was, of course, a hunter, but like Athena with whom she was often confused, she was probably related to the Mistress of the Animals depicted in Mesopotamian, Syrian and Aegean art.

A connection between *sphēx*, and the plural *sphēkes* with *sphinx*- *sphinkes* suggests another link between wasps and sphinxes, which, in the light of Artemis association with the latter, would be appropriate for that aspect of the genii’s representation.

LIONS AND BEARS. The parallel between wasps and lions brings us to the mammalian features of the genii. These features may represent traces of the original hippopotamus of Thueris or those of the lion that was beginning to represent the Egyptian goddess and her helpers in the late Middle Kingdom. Lions were still present around the Aegean in the Second Millennium BCE, which might make them preferable to the exotic hippopotamus. Another northern animal was also involved. In Chapter 3, a conceptual equation was suggested between hippopotami and bears: the parallel between the Egyptian *db* “hippopotamus,” and the Canaanite *dob* “bear.”⁸⁰ In addition, in at least late Egyptian cosmology, the hippopotamus with a crocodile on her back, the goddess Reret, was seen as the constellation known to the Greeks and to us as the Great Bear.⁸¹

Given this equation and the likelihood that bearlike, as well as leonine, features influenced the snouts or faces of the genii it is interesting to note that Greek legends connected Artemis and the nymphs to bears in the story of *Καλλιστώ*. *Kallistō*, one of the nymphs, was seduced by

Zeus and turned into a bear. Artemis wanted to kill her but Zeus saved her baby Arkas who grew up to become the ancestor of the Arkadians. Kallistō herself was snatched up and put in the sky as the constellation Arktos, the Great Bear.⁸² Thus, here is a specific parallel to Reret and Thueris.

The nymphs' role as bears also appeared in ritual. In Archaic and Classical times, at the beautiful bay of Brauron in eastern Attica, little girls between five and ten celebrated a cult of Artemis by dancing in her honor while dressed up as bears.⁸³ Even more fascinating, the girls wore robes, over their normal garments, the color of which was κροκωτός. The usual translation for this word is "saffron, yellow" as in crocus. Many scholars, however, have plausibly seen it as "tawny" to match a bear's fur.⁸⁴ It should be noted that the Greek word κροκόδῆλος "crocodile" comes from the same root; it could also mean "tawny." The chromatic uncertainty is confirmed by the mixed color of the equivalent of the crocodile skin on the backs of the genii portrayed on a fragment of Mycenaean wall painting.⁸⁵ The little girls at Brauron link the genii to the "gentle" Artemides and Eileithyiai as do the midwifery and stinging pains of childbirth. The water pouring, honey giving, and hunting all indicate that the nymphs of the Archaic and Classical periods derive from the Minoan and Mycenaean genii and that the latter originated from Thueris and her demons.

MUSES AGAIN. How do the Muses fit in this scheme? First, nymphs and Muses were not dissimilar. They formed groups of beautiful adolescent or young women who frequented mountains, springs, pools and other wild places. Both, for instance, had cults at Mount Helikon in Boiotia as well as in Arkadia.⁸⁶ Both Muses and nymphs were associated with Apollo and Artemis. Thus, it is probably best to see the Muses as a subset of the nymphs. If this is the case, the genii could well have been prototypes of both nymphs and Muses. We know, for instance, that it was a commonplace that bees were seen as the "birds of the Muses."⁸⁷

The Homeric *Hymn to Hermes*, was probably written in the seventh century, when the plaque of nymph bees, mentioned earlier, was made. In the hymn, Apollo says to his brother Hermes:

There are certain holy ones—three virgins gifted with wings: their heads are besprinkled with white meal, and they dwell under a ridge of Parnassos. These are teachers of divination apart from

me, the art which I practiced while yet a boy following herds. . . . From their home they fly now here, now there, feeding on honeycomb and bringing all things to pass. And when they are inspired through eating yellow honey, they are willing to speak the truth, but if they be deprived of the gods' sweet food then they speak falsely as they swarm in and out together.⁸⁸

These bee-nymphs were called the Thryai but their arts of ecstatic prophecy makes them resemble both the three Fates and the Muses.

LEVANTINE INFLUENCES. Some interesting parallels for the Cretan genii and nymphs and Muses can be found in the Levant. Late Bronze Age myths from Ugarit, refer to the three nubile daughters of the god Ba'al. Called different names in different myths, they all appear to have connections to the earth, the dew and fertility. The most obvious of these is ʾTly whose name comes from the root **tal* found throughout Afroasiatic. Orel and Stolbova see four roots with this structure and the meanings "give birth, young animal, dew drop, flow, pour."⁸⁹ The Ugaritic *tll* and the Hebrew *tal* mean "night mist, dew" and there is the Hebrew *tāleh* "lamb, young of other kinds." This provides a good etymology for Greek **θάλλω** (H) "grow, be flourishing." The only Indo-European parallel forms come from Albanian and Armenian. Michael Astour has convincingly derived the Greek traditions of the three daughters of Kekrops, the founder of Athens, and Hesiod's three Graces from these Semitic myths.⁹⁰

One of the Graces was called **Θάλεια** and Tháleia was also the name of one of Hesiod's Muses. Conventionally, there were nine Muses, but the specific number was inconsistent. Thus, I think it is worthwhile considering these Semitic myths in conjunction with the Greek traditions about nymphs and Muses and the Bronze Age representations of genii. The scene on the large ring from Tiryns, discussed above, is clearly concerned with vegetation. Branches or shoots of trees stand between the genii and are represented above the scene. But there are also hints that they might be blades of wheat or barley. The relation to the watering or "lustration" of Thueris and her helpers to that of the genii has been referred to earlier in this chapter and Greek Archaic images of Artemis indicate a relation with poured or flowing water. She was also known as Limnatis or Limnaia "the lady of the lake."⁹¹

The Tiryns ring, however, indicates that the genii are watering veg-

etation. A smaller seal shows this function more strongly. Two genii hold libation jugs above branches set in “horns of consecration.” In Ugaritic mythology Pġt, the daughter or wife of the sage Dan^{el}, “carries the water that spreads the dew on the barley, knows the courses of the stars.” Pġt, in turn, has been identified with Pû^{ah}, a midwife who warned Moses of danger.⁹²

Here we have a confirmation of the connection of the “nursery” to both the bringing to life and the nourishing of both plants and children.

Hampe and Simon tentatively see the flecks that cover both the canopy above the scene and the dress of the goddess on the Tiryns ring as, “little ‘drops’ [that] might indicate the intention of the cult: to produce rain, always a matter of great concern in Mediterranean lands.”⁹³ The idea is plausible, although the drops could also represent dew. In the center of the canopy above the scene is a circle with a star inside it. If this is read as a Cretan version of the Egyptian hieroglyph ⊕ (N15), it would be the *dw3t* “the Underworld, place of the morning twilight.” Either or both of these meanings would seem appropriate. The Ugaritic legends refer to the daughters of Ba‘al descending into the earth for the birth of a mysterious son of Ba‘al but they are also concerned with watering and the encouragement of vegetation. Twilight is, of course, the time of dew.

The connection with *tal* or *thal(l)* “dew,” in fact, provides a clue as to the ceremony being represented. The word **θαλλός** (H) means “young shoot, young branch”; **θαλός** (H) is used for “scion, young child.” Homer uses the title **Θαλῶσια** or a festival of Artemis—“of the golden throne,” of the “first fruits of the harvest in . . . rich orchard land.”⁹⁴ The ring could represent this. On the other hand, the scene also resembles Homer’s Cave of the Nymphs.

CHILDBIRTH AND APOTHEOSIS. It is altogether appropriate that Artemis/Eileithyia should be served by miniature versions of Thueris, because the watering and nourishing of plants was closely associated with aiding in human birth.

It should be remembered, however, that the oldest reference to Thueris’ prototype ⁹Ipy is in the *Pyramid Texts*. The *dead* pharaoh calls on her to suckle him with her divine milk, to make him be born again into immortality. Similarly, the Egyptian word *wdn* does not merely refer to the physical processes of labor and giving birth but also to the installation of kings and gods.

The semantic field of the name Bēs—discussed above—suggests the same combination. Armed with knives and protective symbols, Bēs and Thueris were the deities of, and guardians over, not merely physical but also spiritual birth or change of state: death and, possibly, initiation into mysteries and elevation to divinity. Sometimes the two deities cooperated but other times Bēs used the music of the drum and lyre and dances to appease the goddess and soften her savagery.⁹⁵ It seems to have been in this connection that Bēs and the Thueris lion demons appeared as the guardians of gates in the *Book of Coming Forth by Day*.

In the Aegean, some at least of the young female helpers of Thueris/Eileithyia/Artemis would have been what one might call “spiritual midwives.” As such, these Muses helped people change their state and status with ceremonial and *music*. Therefore, poets called on the Muses or “children” for help to reach a higher state of poetic exaltation. It should also be noted that in late times Bēs was assimilated with Horus, as god of the young sun, whose Greek counterpart was Apollo. Retaining his functions as guardian of life’s passages—along with Thueris and her little or young followers—Bēs provides a convincing prototype for Apollo as the leader of the Muses and patron of music.

HOMER AND HESIOD. The names of both Homer, Ὅμηρος, and Hesiod Ἡσίοδος, are difficult to explain in terms of Indo-European. As a word “ὀμηρος (5) means “hostage, pledge.” and some later writers used it in the sense of “blind.” Frisk and Chantraine, however, see this meaning as derived from the name of the blind poet rather than the other way around. The Egyptian etymology is from *hmww-r “craftsman with words.” *Hmww* on its own meant “craftsman, orator.” *R* meant “speech, words.” Undergoing the vowel shift ū>ē would produce *hmē-r. Indications of the first vowel come from the general Coptic *ham* “craftsman,” but with a Bohairic variant *hom*. Thus, a form *homē-r would seem quite permissible.

Chantraine believes that the name Hesiod “apparently” derives from one who ῥσι “throws” his Φοδή “voice.” The first element can be explained more plausibly as coming from the Egyptian *hṣi*, *hṣw* or *hṣyw* “minstrel, singer.” It is rendered *hōs* in Coptic, which would regularly derive from a Second Millennium *hās(i)* and provide an etymology for the Greek vocalization *hēs*. The origin of the second element is less clear-cut; it could be from the Greek *wodē* or from the Egyptian *id* “child, simple person.”

RETURN TO THE MUSES. Hesiod began his *Theogony*:

With the Heliconian Muses let us start
our song: they hold the great and holy mount
of Helicon, and on their delicate feet
They dance around the dark and bubbling spring

.....

The Muses once taught Hesiod to sing
Sweet songs while he was shepherding his lambs
On holy Helicon; the goddesses
Olympian, daughters of Zeus who holds
The aegis, first addressed these words to me:
You rustic shepherds, shame: bellies you are,
Not men! We know enough to make up lies
Which are convincing, but we also have
The skill when we've a mind, to speak the truth.

So spoke the fresh-voiced daughters of great Zeus
And plucked and gave a staff to me, a shoot
Of blooming laurel, wonderful to see,
And breathed a sacred voice into my mouth
With which to celebrate the things to come
And things which were before. They ordered me
To sing the race of blessed ones who live
Forever, and to hymn the Muses first
And at the end . . .⁹⁶

And when the daughters of great Zeus would bring
Honour upon a heaven favoured lord
And when they watch him being born, they pour
Sweet dew upon his tongue, and from his lips
Flow honeyed words, all people look up to him
When he is giving judgement uprightly,

.....

Advising with soft words. And when a lord
Comes into the assembly, he is wooed
With honeyed reverence just like a god,
And is conspicuous above the crowd,
Such is the Muses' holy gift to men.⁹⁷

Hesiod goes on to link the Muses and their music to Apollo. This

connection, too, would point to Thueris' consort Bēs/Horus as the divinity of music and of the ceremonial for rebirth into higher realms.

Nevertheless, for Hesiod the Muses, not Apollo, are at the center of the stage. In this the earliest extant and archetypal description of the Muses—and for that matter nymphs—we see all the themes that modern Europeans and Americans know and love. These graceful figures seem worlds away from the genii of Minoan and Mycenaean art and Thueris and her helpers in Middle Kingdom Egypt. Nevertheless, many of the earlier characteristics persist: flowing water, dew, washing, making plants grow, sweetness and honey, gentle daughters, using dance song and *music*, darkness, present at birth, raising status, giving godlike powers or initiation.

We are not allowed, however, to forget the original role of the Muses and nymphs as midwives. The poem itself is called *Theogony* “birth of the gods” and birth is central throughout. He comes to a crescendo in the last hundred lines, where the syllables “tek” or “tik,” forms of the verb τίκτω (H) “give birth, bring forth,” sound like a metronome.

This section of the poem is sometimes supposed to be spurious and to form a lead into another work, *The Catalogue of Women*. Whether or not this is the case, the last two verses remind us of the basic functions of the Muses as “daughters, midwives and bestowers of pain and death through childbirth.”

Now sing of women, Muses you sweet-voiced
Olympian daughters of the aegis-bearing Zeus.

CONCLUSION

This complex picture of intricate intertwining and development of Egyptian, West Semitic, Anatolian, Minoan, Mycenaean and later Greek cultures demonstrates the exceptionally mixed nature of Greek civilization. It also shows the strengths of both persistence and change. The extraordinary survival and transmission of the specifics of complicated cults from Middle Kingdom Egypt to Old Palace Crete to Mycenaean Greece and on to Hesiod contrasts with the distinctiveness and new features in the Minoan genii and the transition through the bee-nymphs and leonine and sphinx-like Artemis of the Archaic period to the thoroughly humanoid nymphs and Muses of classical Greece. The process provides a clear example of the principle of modified diffusion in which ideas are

taken from their original context and blended with others to produce something that is completely new and unique to the receiving culture.

Throughout all these transformations, the name “Muse” appears as a remnant and reminder of the Egyptian origin. Like that of Moses it comes from *ms* “child” and *msi* “birth.”

CHAPTER 12

SIXTEEN MINOR ROOTS

INTRODUCTION

Calling these Egyptian words “minor” is a misnomer. They were important words in the Egyptian language and significant concepts or artifacts in Egyptian life. They are only labeled in this way in comparison to the words and roots discussed in the previous two chapters.

1. ἰmn ἀμείνων. Orel and Stolbova postulate an Afroasiatic root ***Yamin** “right hand” found in Berber and Egyptian and throughout Semitic.¹ It also was used for cardinal directions. Semitic speakers facing east saw Yemen to the south, whereas Egyptians, for whom the principle direction was south, saw the west as *imnt* with the final -t of the feminine. As such, it was pronounced *amnte* in Sahidic, *amenti* in Bohairic and *emnte* in Akhminic. Vycichl reconstructs the original pronunciation of ἰmn as *yamina.² As is well known, Semitic-speaking cultures strongly prefer the right side as being fortunate and clean. It is likely that the same held true in Ancient Egypt.

The Greek **ἀμείνων** (H) means “better, stronger.” Frisk and Chantraine, who have no etymology for it, speculate that it was originally a positive word and only later obtained the comparative suffix -όν. An Egyptian or possibly Semitic loan word into Greek would already have

the comparative sense, to which it would have been altogether appropriate to add the comparative suffix. The phonetic correspondence between *yamina and *ameín(ōn)* is good and the semantic excellent.

2. isw Αἶσα, ἴσο-. Αἶσα (H), already present in the Mycenaean *a₃ sa*, is very similar to *moīra* in meaning: “part accorded” and, by extension, “lot, destiny.” It appears in the verb ἀνα-ισιμόω “to apply appropriately, dispense” and in a number of words with the stem αἰσυμν- *aisymn-* “magistrate, arbiter in the games.” *Aἶsa* is supposed to have an Indo-European cognate in the Oscan *aetis* “portion.” The disappearance of the Greek medial -s- creates problems with this and any Indo-European etymology. The Greek root would seem more likely to come from the Egyptian *isw*, Coptic *asu* (S) and *esu-* (A) “fair reward, compensation to which one is entitled.”³

It is interesting that the lexicographers do not associate *aἶsa* with ἴσος, and the prefix ἴσο-, both of which have very much the same connotations. This failure seems to be the result of Boiotian and Cretan forms with a *F digamma*. Frisk and Chantraine are convinced that the original form was **Fisfo*.” They cannot find an etymology for this reconstruction, however, because in Greek the /s/ disappeared from the PIE *sw. Therefore, the two lexicographers added a /d/ constructing *wid-s-wos. Chantraine considered linking this to the root *weid “to see, know.” Meillet, on the other hand, hypothesized a *witwo, thereby linking it to “two!” As mentioned in Chapter 5, the ancient initial *F* did not always represent a genetic Indo-European /w/. Failure to elide and the letter itself can be the result of borrowings from Afroasiatic initial *ʿayin* or *>aleph*.⁴ The strong phonetic resemblance and the close semantic relationship with *aἶsa* make a loan from the Egyptian *isw* for both seem preferable to these convolutions. Thus, the Egyptian *isw* is almost certainly the etymon of both *aἶsa*, *ἴsos*—feminine *ēisē*,—“equal in share, number or right.” Such compounds of *iso-* as *isonomía* “equal laws” and *isēgoría* “to speak as an equal” were, of course, critical in the formation of Greek democratic theory.⁵

Finally, there is ἄξιος (H) “counterbalance, equivalent in value, just price.” The semantic fit with *isw* is excellent; the phonetic is somewhat less so. Egyptian s- is rendered as *xi* in the generally accepted borrowing *sft* > *xíphos* and, in Chapter 11, I argued that the divine name and symbol of initiation, Bs, is expressed in the ecstatic cry πᾶξ κογξ.⁶ In addition, *xi* and *sigma* are exchanged within Greek. The vowel or glide /i/

remains a slight problem since it is not enough to block the powerful semantic case. Chantraine associates *áxios* with ἄγω a verb with many meanings: “to lead, drive, push, marry etc.” He specifies the sense of “weigh.” This meaning is not given in his lemma on the word or in that in Lidell, Scott and Jones.

3. Wr ib ὕβρις. The Egyptian compound *wr ib* or *ʿ3 ib* literally means “great heart.” Interestingly, however, it was always used pejoratively as “arrogant or insolent.” The Greek ὕβρις (H) also means “unwarranted pride, insolence.” Neither Frisk nor Chantraine can give it an Indo-European etymology. Chantraine is skeptical of Szemerényi’s proposal that it derives from a Hittite *huwapar “outrage,” reconstructed on the basis of a verb *hup* “maltreat.”⁷ The frequency of the exchange of the liquids /l/ or /r/ between third and second positions was mentioned in Chapter 8⁸ and the Greek *upsilon* is always aspirated. These make the phonetic correspondence between *wr ib* and *hybris* very strong. The semantic match is perfect.

4. B3h φαλ(λ)ός. Gábor Takács suggests that the most plausible origin for the Egyptian *b3h* “foreskin, phallus” is an Afroasiatic root *b-l “penis.” The Greek φαλλος, *phallus* (5), sometimes with a single *lamda* as in φάλης, was replaced in Ionian by the Thraco-Phrygian form βαλλίον, *ballíon*. Chantraine argues on the basis of this and the forms φαλλήν and φάλλαινα that the Indo-European root was *bhl-nó- “to swell, inflate.” The Greek term definitely refers to an erect phallus. This reference, however, leads to the phallic cult of Dionysos. Both Herodotos and Diodoros emphasized the connections between this cult and Egypt. Paul Foucart made a powerful case backing the ancient claim and such connections have been shown earlier in this volume.⁹ For this reason the Egyptian etymology would seem preferable to the Indo-European.

5. Msti μάσθλης, msdt μαστός, mtd μάστιξ, msdi μισέω. The Late Egyptian *msti* “leather bucket,” provides a plausible etymology for the otherwise unexplained μάσθλης (5) “leather objects.” The Coptic *mesthēt* “breast” and the Late Egyptian *msdt* derive from *msti* *h3ty* “leather bucket of the heart.” This serves as an origin for the Greek μαστός (H)(μασθος, and μαζός) “breast.” Chantraine reconstructs an earlier *μαδτος and tentatively links this to μαδάω “spoiled by humidity”!

The word *mtd* “whip lashes” may be a Semitic loan word into Egyptian,

but it would also serve as an etymology for the Greek **μᾶστιξ** (H) “whip.”¹⁰ Chantraine derives the latter as an “expressive form of **μαίομαι** to search, touch or reach.”

Frisk and Chantraine are unable to find an etymology for **μισέω** (H) “to hate.” Interestingly, however, it has a number of forms with a dental: **μισητός** (5) “hate, hateful” and **μισήτη** “prostitute.” These can be explained as morphological. Equally, however, they could be remnants of an earlier form. The Egyptian *msḏi* “dislike, hate” provides a perfect semantic correspondence and a reasonable phonetic one.

6. nw (3) λάω, νόος, νοερός. The anthropologist Colin Turnbull described the Ik of northeast Uganda in miserable and hostile terms. In their language, *noos* is a word for “cleverness.” In the more highfalutin Greek terminology reserved for European cultures, **νόος** (H) means “intelligence.”¹¹ On the face of things, it would seem absurd to see this as anything other than random coincidence. If we dig deeper, the relationship becomes more complicated. There is no doubt that in each case the final -s came from different sources. The Ik source is uncertain but may be a stative suffix and the Greek the usual masculine nominative singular suffix -os.

Before coming to the root, however, we need to consider both the semantic field and the immediate origin of the Greek term. Nearly every language shows a close relationship between seeing and knowing. To take an Indo-European example, the Latin *videō* “I see” and the Greek **ἰδεῖν** “have seen” belong to the same family as the Greek **(F)οῖδα** (*w*) *οῖδα* and German *wissen* “know” and the English “wit.” Chantraine defines the meaning of the Greek word **νόος** intelligence, spirit, in so far as one sees or thinks.” The verb **νοέω** (H) means “to see, perceive.” There are also the adjectives **νοερός**, *noerós* and **νοήρη** “intelligent.” Frisk proposes an Indo-European root also found in the Gothic: *snutrs* “intelligent.” Chantraine denies this and other still less likely hypotheses and states baldly that the word has no etymology.

In Egyptian *nw(3)*, transcribed in cuneiform as *naṯa* and as *nau* in Coptic, means “to see, watch, hunt.”¹² In this it is extremely close in both phonetics and semantics to the Greek **λάω** (H) “to see look, watch, hunt.”¹³ Frisk and Chantraine are skeptical of previous attempts to find an etymology for this word. The same derivation for it and **νόος** and **νοέω** is equally unassailable. On the other hand, it is unlikely, although just possible, that the /r/ in *noerós* and *noērēs* come from the form *nw(3)*. . . .

The Egyptian *nw* belongs to a widespread Afroasiatic family of words from the root *na> “to see,” found in Berber, Chadic and Lowland East Cushitic.¹⁴ Interestingly, however, Ehret has reconstructed a similar root *nō “to watch, listen, observe” in Nilo-Saharan. It would seem very likely the two are related. Ik is a Nilo-Saharan language and it is from *nō that Ehret derives the Ik word *noos*.¹⁵ Thus, there is a connection—if distant—between the Ik and Greek words for intelligence.

7. Nmī, nm̄, nm νέμος, νέμω, νόμος, νέμεσις, νομάδες. The Greek root √nm, which is generally entered in the etymological dictionaries under the heading **νέμω** (H), has an extraordinarily rich and wide semantic range. The verb itself is usually classified in two ways: first as “to distribute food, booty etc.” and second as “to graze, pasture.” Linked to the latter is *némō* in the sense “to inhabit.” The fact that these are not entirely discrepant is shown by the specialized meaning “to allocate pasture.” Divided along the same general lines are the nouns **νομή** and **νομός**, meaning both “pasture” and “distribute.” A later form **νόμος** (5) developed into the general sense of “law.” From this came **νομίζω** (6) “to regulate, follow custom” and, by extension, “to acknowledge, believe.” **Νέμεσις** (H) means “just allocation or fate.” On the pasture side, there are **νέμος** (H) “heath, wildwood,” **νομάς, νομάδες** “nomad, nomads” and the proper noun **Νυμάδες** “Numidians.”

Chantraine maintains that *némos* is never pasture but always “bush,” even extending to female pubic hair. Therefore, it is not to be associated with *némō* or *nomós*. He sees it as possibly related to the Latin *nemus* “sacred wood” and the latter’s Celtic cognates. On the other hand, Ernout and Meillet point out that, unlike the Latin and Celtic forms, the Greek *némos* is far from sacred. Thus it would be better to leave the non-Greek forms out of the picture and to treat the Greek ones as a single cluster.

The etymology for *némō* is universally seen as deriving from an Indo-European stem found in the Teutonic family: the Gothic *niman* and the German *nehmen* “to take.”¹⁶ The lack of semantic congruence between giving and taking is not quite as absurd as it might appear. As my colleague Frederick Ahl puts it in the case of Greek “every word means something, its opposite and something dirty.” Nevertheless, the association of *nem-* “to give” with *nem-* “to take” can only stand if it is without a challenger.

Nmī in Middle Egyptian means “to travel.” Interestingly, it is often

written with the sign of the winding wall 𐀓𐀓 (O5). Whether pronounced as *nm* or *mr*, it is associated with cattle. It is also used, for instance, in *nmi* “to low as cattle.”¹⁷ The well-known “Minoan” mural from Tel ed Dab’a also shows a young man on a bull against a background of winding walls.¹⁸ The same sign appears in some writings of *nmiw* š’ “Bedouin,” literally “sandfarers.” The association with cattle occurs indiscriminately in words with *nm*, *mr* or *mn*. *Mni* is “to be a herdsman” and *nmiw* “herdsmen.” This provides an etymology for the Μινύαι Minyans (H). The etymology of this gentilic is made plausible by their inhabiting Βοιωτία, Βοιῳτία “cattle country.” In Coptic *mane* (S) *mani* (B) was “to graze animals.”

Although the connection is not as tight as with *nmiw* the connection between *nmi(w)* and nomadic cattle herders is still clear. There was even a Macedonian word νόμιος, *nómios* “shepherd.” Unfortunately, because *nmi(w)* was not transcribed into cuneiform and did not survive into Coptic, it is difficult to reconstruct the vowels. Thus, the phonetics of the loans into Greek are merely reasonable. The semantic side is strengthened, however, by an attested Late Egyptian form *nm*’ “to set out or lay down walls.” This form uses 𐀓𐀓 (O5). This meaning corresponds well with what seems to be the original and central meaning of *némō* “to allocate pasture.”¹⁹

8. Nsyτ νόσος, νοῦσος. Despite attempts to explain the survival of the medial -s- by postulating an original *νοσφος “illness,” neither Frisk nor Chantraine can find any etymology for the word. The most plausible source is the Egyptian *nsyt* “illness, demon of illness.”²⁰ The uncertainty of the vowels is more than made up for by the semantic correspondence reinforced by the central role of Egyptian learning in the formation of Greek medicine.²¹

9. Ndm νήδυμος. Pokorny fails to explain νήδυμος “sweet.” Homer only applied the word to sleep but the range was probably wider and later writers used it more generally. Neither Pokorny nor Chantraine could accept Pisani’s derivation of it from νήδυς “stomach, womb or other bodily cavity.”²² The most likely etymology for *nēdymos* is from the Egyptian *ndm* “sweet, pleasant, whole, comfortable.” The Coptic vocalization for the adjectival form is *nūtem* and, as in all Coptic dialects, earlier /ā/ became /ū/ after nasal consonants, as opposed to the general shift ā

>ō.²³ The Canaanite cognate *nā'ēm* “pleasant, soothing” strengthens the value /ā/ of the earlier form. Given the general Greek shift ā > e, the phonetic fit would seem to be almost as good as the semantic. A reduced first vowel causing a prothetic one, however, seems to be the origin of the name Ἐνδυμίων for the beautiful young hero who was granted everlasting sleep.

Chantraine complains that the Homeric word ἥδυμος “sweet” is “always transmitted under the mistaken form *nēdymos*.” There is no doubt that ἡδύς “pleasant, sweet” derives from the Indo-European *swat (*suad) “sweet.” The source of *hēdymos* is unexplained. It would seem to be a portmanteau word made up of *hēdús* and *nēdymos*.

10. ἤτρ ἐταῖρος, ἕτερος. The Egyptian word *htr* is clearly linked to the Arabic *hatar* “to fix, make a knot.” It has two further competing etymologies. The first is from a root √ḏugur “to darn” found in the West Chadic language Sura. Such a connection would require a number of important phonetic changes including metathesis. The second is to relate *htr* to a Semitic root √ḥtl. “bandage or swaddling.”²⁴ The general sense of the Egyptian word is “to bind together.” It has two specialized meanings: one is “to be bound, to pay one’s taxes”; the other is “to attach or yoke a pair of oxen together” to pull a plow or cart. With the arrival of chariots during the Second Intermediate period, it became the name for a pair of horses. In Coptic *hto*, plural *htōōr*, means “horse, horses.” However, the sense of “two bound together” survived in the word *hatre* “twin.”

The Greek **ἕτερος**, a₂tero in Linear B has as its basic meaning “one of two.” Chantraine sees the suffix -tero as an indication of the dual and the word as a whole from a hypothetical stem *sm̥teros which he sees also in the Sanskrit *eka-tara*. This would seem equally plausible as a derivation from *htr*, if it were not for similar word, **ἐταῖρος** (H) “comrade, companion” and in Macedonian “horsemen.” (Usually two men rode in a war chariot.) Neither Frisk nor Chantraine links *hetairos* to *héteros*. Instead, they see *hetairos* as coming from an Indo-European root *sweta found in the Old Russian *svatŭ* “brother-in-law” and in the Greek **ἕται** (sometimes *Feta*-) “companions.” The aspiration of *hetairos* and its distinctive ending provide slight phonetic difficulties for this etymology.²⁵ But the Egyptian etymology from *htr* can explain the striking phonetic and semantic similarities between *héteros* and *hetairos* and the connection with horses.

11. Ἡδι κάτα. The Greek preposition and adverb *κάτα*, *káta* (H) covers a semantic field unparalleled in any other Indo-European language. Frisk describes it as “down, against, along, through.” Chantraine sees the general sense as “to adapt oneself to” or “toward the bottom.” He states that it “ought” to correspond to the Hittite *kata* “with, below” and the Welsh *cant* and Irish *cet-* “with.” The Egyptian *Hdi* means “to travel northwards or downstream” or “flow of water.” The Sahidic and Boharic descendants *hate* and *hati* convey the same sense, “to flow, pour down, current.” This corresponds perfectly with Chantraine’s general sense of “to adapt oneself to.” The semantic fit between *hdi* and *káta* is strengthened by such common terms as *καταρρέω* (H) “flow down,” *καταρόον* (H) “downstream” and *καταρράκτης* (5) “waterfall, particularly of the Nile.” *Káta* has a sense of flowing water that supposed Indo-European cognates lack. Such precision makes an Egyptian etymology competitively plausible. It is possible that the Hittite form was also borrowed from Egyptian.

12. Sgr(i) σῖγα. The Greek *σῖγα* (H) is “silence.” In Homer the verb **σιγάω* has only one form, the imperative *σίγᾱ*. Chantraine is skeptical, on phonetic grounds, of any attempt to link this word to the Old High German *swigan*, German *schweigen*. Given the initial *s-*, it is almost certainly a loan and the Middle Egyptian *sgr(i)* “silence” is a very good candidate for the source. As mentioned in Chapter 9, **p3 sgr* “the silence” provides a strong etymology for *pségos* “tomb.”²⁶

13. Sdr στρατός. Στρατός (H) “camp, army” is a very fruitful stem in Greek: *στρατηγός* “general,” *στρατηγέω* “to lead an army,” *στρατηγός* “general,” *στρατηγία* “strategy,” *στρατιότης* “soldier” and *στρατεύω* “to campaign.” The lexicographers agree that the basis is *stratós* “camp.” They derive this from a stem found in the Sanskrit *strta* and the Avestan *stərəta* “to stretch out” and the Latin *sternum*. Another possibility, not noted by these scholars, is the Semitic root $\sqrt{sdr}$ “to set in order” found in the Akkadian, *sidru*, *sidirtu* “row, battle line.” This root, however, does not have “camp” as the primary meaning. I maintain that the most likely source is the Egyptian root *sdr* “to pass the night” and the noun *sdryt* “sleeping place.” In Late Egyptian *sdr̥t* meant “night camp, bivouac.” The possibility that the Egyptian *sdr̥t* was already developing some of the other meanings found in Greek is suggested by the Demotic verb and noun *sd̥y* “fight, warrior, hero.”

14. Dpt δέπας. Written *dīpa* in Linear B because of a unique innovation $e > i$ in that dialect, *dēpas* meant “large vessel” and later “drinking cup.”²⁷ None of the standard lexicographers offers an Indo-European etymology for it. The only evidence of one comes from a form *tepas* cited by Laroche from hieroglyphic Hittite. It does not, however, appear in his Luvian dictionary nor do Chadwick or Ten Cate, whose work appeared several years later, mention it.²⁸ Even if this form and its meaning are confirmed, it would not rule out the possibility of an Egyptian etymology for both words. We know that there were Lycians in New Kingdom Egypt.²⁹ The Iron Age name of a Lycian high official or nobleman, Mizretiye, indicates that men of Egyptian descent or claiming contact with Egypt lived in that country.³⁰ The word *natr-* is also used on a trilingual inscription and since the Greek clearly means “god,” it must derive from the Egyptian *ntr*.³¹ Other Egyptian cultic and cultural penetration of Anatolia has been discussed above in Chapter 10.

The Egyptian etymology for *dēpas* is from *dpt* “boat.” This has been vocalized for Middle Egyptian in various ways. Working on the basis of an apparently intrusive *w*, which occasionally appeared before the feminine ending *-t*, Gardiner reconstructed a form **dāpet* from an earlier *dāp^wat* in the “absolute” and **dep^wat(ef)* in the construct.³²

Semantically, it is very easy to go from vessel to vessel or, in Greek, from γαῦλος “Phoenician ship” to γαυλος, “bucket” and γαυλις, “oil lamp” all of which come from the Canaanite *gullāh* “basin, bowl, bowl of oil lamp,” probably to be reconstructed **g^wa/əl*.³³ The clinching argument that *dēpas* derives from *dpt* comes from a reference by Pherekydes to a *dēpas* in which the sun travels across the ocean at night.³⁴

The technical terms for this very Egyptian concept were *wiʕ* and *mʕndt*. Even so, a *dpt ntr* “sacred bark” is attested in the *Pyramid Texts* as the “ship of the sun god” and later as Osiris’ festival. Thus, Pherekydes was undoubtedly referring to *dpt*. Another plausible derivation from *dpt* in this sense is δίφρος “litter, chariot, vehicle of the sun throne.” Chantraine argues with some phonetic difficulty that it is based on *di* “twice,” because of two-person chariots. He has no explanation for the final *-phros*. Thus, this etymology, like that of *dēpa(s)* for *dīphros* from *dpt*, is extremely plausible.³⁵

15. Dmi δᾱμος, δήμος. Allan Bomhard reconstructs a Nostratic root **tʰim* or **tʰem* “to build, construct” with **tʰom* for “house.” He only finds it in the Sumerian *dīm* “to make, build” and the well-known Indo-

European root.³⁶ This root occurs in the Greek *demō* “construct” and *démas* “form structure”; the Gothic *timrjan* “to make with wood” from which derives the German *zimmer* “woodwork” hence “room” and our “timber”; the Latin *domus* and the Slavic *dom* “house, building.” The original sense, however, appears not to have been working wood but building by tying reeds together. Thus, in Sumerian one finds *dīm* also in the sense of “tie fast.”

In Indo-European, too, the basic sense of “bind together” was retained and used for people. This explains what Benveniste saw as a basic discrepancy between the Greek *dómos* “house as a building” and the Latin *domus* “home as a social unit.”³⁷ In the latter sense we see the Greek δάμνουμι “tame,” as well as the Teutonic root from which we derive “to tame,” in the sense of to bind the animal.

The Egyptian root $\sqrt{dm}$ meaning “to bind” found in *dm3* which with that meaning may well be descended from Nostratic *t'm. Afroasiatic /t'/ broke down in Egyptian to /d/ or /t/. A possible pair for *dm3* is *tm3* “mat.” As in Indo-European, the “binding” could also have social connotations. It is present in *dmd* “assemble,” *dmdw* “crowd,” *dmi* “join,” *dmi* “town, village” and *dmi w* “fellow citizens.”

The Greek word δῆμος, δήμος in Attic and Ionic is attested in Linear B as *damo*, which John Chadwick took to mean “an entity which can allocate holdings of land probably a village.”³⁸ The Homeric *dēmos* seems to have been a township with land but more emphasis is on the people. The Athenian “demes,” which according to legend were founded by Kekrops and Erekhtheus with their Egyptian connotations, were both territorial and tribal divisions.

Presumably because of both the semantic and phonetic difficulties, no scholar has to my knowledge tried to link *dāmos* to the Indo-European root *t'em discussed above. Pokorny, Chantraine and Frisk have associated it with the Old Irish *dam* “troop or following.” Despite the lack of any traces outside Greek and Celtic, these could belong to an otherwise lost Indo-European root. A genetic relationship would be plausible in the absence of any challenger. In this case, however, there is a challenger.

Within the semantic field, the Egyptian *dmi* “town, village or quarter” and its inhabitants would seem to fit the Greek *dāmos* perfectly. Phonetically, there is, however, some uncertainty. In Coptic, the city Dmi n Hṛ “city of Horus,” was rendered Timenhur, although it later became Damanhour in Arabic. The cities called Dmi tyw “citizens” or “people of the port,” became Tamiati or Damietta in Arabic. In any event, in

some cases there was vocalization with an /a/ that would allow for a loan into the Greek *dāmos*.

Other pieces of evidence indicating the possibility of loaning from Egyptian are the following words: the Lydian *dumus* “community”??, the Etruscan *tamiathur* “college” and the Phrygian *dumos* “council assembly.”³⁹ The close physical neighborhood, but distant linguistic relationship, of these two languages has been mentioned above. The Phrygian *dumos* cannot be related genetically to *dāmos*, because of both the vocalization and the fact that the normal Greek correspondence to the Phrygian /d/ is /th/. Thus, it would seem more likely that loaning is involved. While the etymology of *dāmos* from *dmi* is not certain, given the weakness of the Indo-European parallel, the Egyptian etymology is plausible.

The origin of ἔθνος, a synonym of *dāmos*, was given in Chapter 8.⁴⁰ The Semitic origin of λαός, a synonym of *dāmos* and *ethnos*, will be discussed in Chapter 13.⁴¹ For other words on groups of people, see Chapter 17.

On the semantic side, there is a remarkable parallel between “many” “the assembled multitude” and “the inferiors” found in *ókhlos* from ὄχλος and the apparent calque *hoi pollói*.⁴²

16. Dsrw θησαυρός. A major book has been devoted to the Egyptian term *dsr*. Its author James Karl Hoffmeier, sees it as cognate, with metathesis, to the Ugaritic and Hebrew *grš* “to drive out or away.” This seems plausible in terms of the Egyptian meaning, which Hoffmeier sees as “brandishing a stick, to purify a passage or to clear a place ritually.”⁴³ It resembles the English expression “beating the bounds.” The idea of the space secured in this way exists in the Canaanite *migrāš* “zone around a town for pasturing.”

As an adjective *dsr* meant “holy, sacred,” which in the Egyptian iconic religion was extended to signify “splendid, costly.” *Dsrw* “seclusion” with the house determinative meant “holy place, sanctum.” *Dsr dsrw* was the “holy of holies,” the temple at Deir el Bahri.

Thēsauros (H) is a “storehouse in which one secures provisions, precious objects or treasure.” The most famous examples were the sacred “treasuries” at Delphi. Frisk states that this word is “without an etymology.” Chantraine believes that it could be a loan. The semantic parallels between the Egyptian and Greek words are exact. Unfortunately, as *dsr* was not transcribed into Akkadian and does not appear to have survived into Coptic, the vocalization cannot be determined. Nevertheless, the

consonantal fit is exact and the final -w would seem to correspond to the accented -ós. In short, the case for an Egyptian origin of *thēsaurós* is overwhelming.

CONCLUSION

The sixteen featured etymologies in this chapter were selected on two bases: the importance of the Greek words derived and the strength of the case for derivation. The choice was not easy as I have many others that are very nearly as impressive according to both criteria.

CHAPTER 13

SEMITIC SIBILANTS

INTRODUCTION

In Chapter 8 I looked at the progress of the Egyptian letter Ξ conventionally transcribed /š/ from /ḥ/ to /š/. I drew an analogy from transcriptions from the Hebrew /š/ into Greek $\chi\theta$, $\sigma\chi$, $\chi\sigma$, and σ .¹ The situation of sibilants within Semitic is even more complicated than that. At this point, I shall not be treating the voiced or emphatic sibilants, which will be considered with individual loans. I shall restrict myself to those that are unvoiced and unemphatic. It is generally recognized that Proto-Semitic had three of this type, conventionally labeled /s¹/, /s²/ and /s³/ . It has also been generally considered that /s¹/ corresponds to the Canaanite and Aramaic letter šīn, /s²/ to the Hebrew śīn and /s³/ to samekh. In Phoenician, unlike the more conservative Hebrew, śīn merged with šīn. In Hebrew śīn remained independent until much later when it and the Aramaic śīn merged with samekh. It is, therefore, maintained that up to then Hebrew retained the original values.² In both Arabic and Ge'ez the modification was different. In both these, /s³/ merged with /s¹/ and /s²/ remained independent but corresponded phonetically to the old /s³/.

Correspondences with cognates in other Afroasiatic languages go against the conventional wisdom that in Proto-Semitic /s¹/ was originally /š/. These cognates suggest that the generally more conservative

was rendered as /s/. For instance, *šmn*, the conventional Ugaritic and Phoenician transcription, was written *sasama* in Linear B and *σήσαμον* in alphabetic Greek. The Canaanite and Hebrew *šōšan* or *šušan* “lily” became *σοῦσον* *soûson* (4).⁷ After 1200 BCE, borrowings from Canaanite and Aramaic /s¹/-/*š*/ still sometimes remained /s/ but equally often became /skh/, /khs/, /ks/ and, very likely, /sk/.⁸ This temporal pattern is the opposite of Greek borrowings from the Egyptian sign transcribed as /š/. For examples of Greek renditions of the Egyptian /š/ as first /k/ and /kh/, see Chapter 8 above.⁹ For renditions from the later development /skh/, there are *šnw* “rope, net” in Late Egyptian “circuit, enclosure, cartouche,” Mycenaean *kono*, *koino* and the Greek *σχοῖνος* (H) “reed, grass, rope, net, bind.” Then there is *σχεδια* (H) “raft” from the Egyptian *šdw* “raft.” Chantraine provides no etymology for either. For a Canaanite example, there is the verb *√slw/h* “rest, repose, prosperity,” an adjectival form of which is vocalized *šālē*.¹⁰ This corresponds to the Greek *σχολή* (5) “leisure, tranquility.” Chantraine sees this meaning as having gone through a “remarkable evolution” to become “study.” Aristotle explained this relationship as the necessity of leisure for scholarship.¹¹ I find it more plausible to suppose that the two meanings come from two different sources, the second being the Canaanite *√skl* and Aramaic *√skl* “to be attentive, understand.”

1. šl, slh, šlh, šll Σκῶλα, Σκυλεύω, Σκύλαξ, Σκυλάω, Σκύλλω, συλάω “to peel or strip.” The Semitic biconsonantal root *√s/šl* “draw out, extract” is found with that meaning in the Hebrew *√slh*. As *√slh* it is “to cast out, send away” and as *√šll* “to spoil, plunder.” The basic meaning seems to be that of the Arabic *salaha* “to flay an animal, strip the bark from a tree.”¹² Černý and Vycichl both reject the notion that the Coptic *šōl* “to strip, pillage, booty” is a Semitic loan on the grounds that it appears as *hl* in Demotic and the Akhminite dialect of Coptic. Given the exact semantic correspondence and the uncertainty of the pronunciation of the Canaanite /s/, as well as the uncertainty created by the merger of Egyptian /h/ with /š/ during the First Millennium BCE, their denial seems to me to be misplaced precision.

The Greek *σκῶλα* (5) means “arms taken from a beaten enemy.” In the singular, *σκῶλον* (5) is “booty,” *σκυλεύω* (H) is “to take the arms from a beaten enemy,” *σκυλάω* “to pillage,” *σκύλλω* (5) “to tear or rend dead bodies” and *σκύλαξ* (H) “puppy, young dog” is an animal

(with the animal suffix -ak) that does such things. Chantraine links *skyllo* to **σκάλλω** (5) “to stir up, hoe, scratch.” Pokorny derives *skállo* from an Indo-European root *skel with such cognates as the Gothic *skilja* “butcher” and the Icelandic *skilja* “divide.” There may well be confusion here between the Indo-European and Semitic roots.

The Semitic source does not gain its advantage over the Indo-European etymology merely from the closer semantic parallels. Other Greek words with the same or similar meanings appear to have derived from earlier West Semitic pronunciations of /s¹/ as /s/. The first of these, which is clear-cut and was proposed by Lewy, is **συλάω** (H) “to strip the arms from an enemy, pillage.”¹³ Chantraine describes this etymology as obscure. At a further remove is **ξύλον** (H) “brushwood, wood, to burn or use for construction, wood that has been worked.” Chantraine proposes an Indo-European root for this *ksulo, which he finds in Germanic and in the Lithuanian *šūlas* “stick, pillar.” He does not see a connection between *xylon* and **ξέω** (H) and **ξύω** (H) “to scrape, scratch, polish.” Chantraine sees *xēō* as a metathesis of a root *qes found in the Old Slav *česati* “comb.” *Xuō* has many derivatives with a final -r, which could link it to the -l in the Semitic root. Chantraine, however, sees **ξυρόν** (H) “knife, razor” as corresponding exactly to the Sanskrit *kxura*, which may have originally meant this. As the form only appears in these two languages, he raises, but dismisses, the possibility that they were both loans from another language. Given the semantic unity and the phonetic similarities, it seems to me that these words are more plausibly explained as belonging to a single cluster borrowed over a period in which the Canaanite /š/ was heard as an unclear sibilant. Given the uncertainty of the early value of *xī*, it is impossible to be sure that this sound was *ks*.

There could be an even earlier borrowing **ῥύλη** (H). This and its derivatives generally have the sense of “wood, forest.” More precisely and as opposed to the clearly Indo-European **δένδρα** *déndra* “tree,” *hylē* means “brushwood, wood that has been cut down for fuel.” This, too, according to Frisk and Chantraine, has no Indo-European etymology. Thus, it would seem plausible to postulate that *hylē* too was a loan from √slh, in this case, given before the Greek shift s>h. A parallel can be found in the pair **ᾄλλομαι** and the Latin *salio* both meaning “to jump” and having no other Indo-European cognates. Their relationship can be explained as deriving from the Semitic root √sll “to lift up, cast up” the Greek word being introduced before and the Latin after the shift.

2. Sēm σῆμα, šēm Σχήμα “name, sign.” The Late Canaanite *šēm* belongs to an abundant family found not merely in Semitic but throughout Afroasiatic. Orel and Stolbova derive this family from a reconstructed root *šüm.¹⁴ Their reason for marking the initial sibilant as plain /s/ is that this is the sibilant in the overwhelming majority of non-Semitic versions and in south Arabian it is *sʼm*.¹⁵ Thus, before 1000 BCE the Canaanite word would have been heard as *sēm* and after it as *šēm*. The Greek borrowings provide clear examples of borrowing, before and after that approximate date. In Chapter 5 I discussed the phonetic relationship between *sēma* “tomb” and *sōma* “corpse” that had intrigued Plato.¹⁶ The Greek poet linked the former to **σῆμα** (H) “sign-particularly in or from heaven, mark, token.” Frisk writes of this latter sense: “It appears to be an inherited word but with no persuasive etymology.” On *semantic* grounds neither he nor Chantraine can accept the etymology originally put forward by Brugmann linking it to the Sanskrit *dhyā-man* “thought.” While the semantic fits of *sēmatos* “tomb” with *smʕ tʕ* and *sēma* < *sēm* “sign” are excellent, there is a phonetic problem in that the Doric **σᾶμα** indicates that the original form had a long /ā/. This form, however, is not attested in Linear B and, therefore, could have entered Ionic Greek after the shift ā > ē but before the Canaanite shift s > š. In this case, the Doric form would have been an analogical back formation.

All lexicographers link **σχῆμα** (5) “to form, shape figure” to the verb ἔχω “to hold, possess,” which has /s/ in its root. The final *-ma* is also explicable. Nevertheless, the semantic gap is vast, and, on both grounds, it is simpler to see it as a later borrowing from *sēm* “name, brand, mark, token.”

3. ʾEsmun Ἰσμηνός, Σμηνός, Σμινθεύς, ʾEšmun Σκάμανδρος “fertile, prosperous.” In zero grade (as the Indo-Europeanists express it) and with a prothetic vowel, √smn “fat, prosperous” fits the course of the river Ἰσμηνός, cascading from Thebes into the rich plain of the Kopais.¹⁷ The river has long been associated with the Canaanite healer god ʾEsmun.¹⁸ In his aspect as healer Apollo was identified with ʾEsmun. He was worshipped at Thebes as Apollo Ismēnios.¹⁹ Then there is the river Σμηνος in southern Lakonia, about which Pausanias wrote: “If ever river water were fresh to drink, this was it.” Nearby was a temple of Asklepios and Artemis.²⁰ The identification of Asklepios with Artemis’s twin, Apollo in his reviving and healing aspect will be discussed in Chap-

ter 19. The joy of salvation from death and other perils can be expressed as ὄσμενος (H).

Apollo's relationship with $\sqrt{\text{smn}}$ occurs in his biname Σμινθεύς. Σμίνθιος Smínthios was also a month name in Rhodes. The scholiast on the *Iliad* stated that this came from σμίνθος and was a Cretan word for "mouse."²¹ The scholiast also mentions a town in the Troad called Smínthos and Stephanus Byzantius linked it to a town in the Troad called Σμίνθη, although these have never been located. The lack of attestation of the word or cult on mainland Greece and the consonant cluster -nth- led twentieth-century scholars to assume that both were pre-Hellenic, despite the preference to see Apollo as the Hellenic god *par excellence*.²² More probably the name Smintheús resembled those of Amalatheia and Eileithyia, which were made up of an Afroasiatic root with the Indo-European suffix -thea/os.²³

The later form $\sqrt{\text{smn}}$ also appears to have reflexes in Greece. In Chapter 10, I noted that, among other things, in the language of the gods Xánthos was the name of the river near Troy.²⁴ On the other hand, it was called Σκάμανδρος in the language of men. In Homeric meter the initial sk- was treated as a single consonant, which suggests a borrowing from a foreign sibilant /š/. In this case, the stem *skaman* can be plausibly derived from the Canaanite *šāmān* "fat, fertile place." The latter would be entirely appropriate for the "fair-flowing, divine, nurtured-by-Zeus" river Skámandros, flowing through the "wheat-bearing" plain.²⁵ There was also a Larissa that, as seen in Chapter 9 above, meant "entry to the fertile land."²⁶ In Chapter 10, I also mentioned Homeric references to the "eddyding Xánthos" as the holy child of Zeus.²⁷ There I linked him to Herakles, but Xánthos could also refer to Apollo, another son of Zeus, with whom Herakles shared many, largely solar, connections. In Chapter 10, I also mentioned that the river fought on the Trojan side with Apollo, Artemis and Leto and was considered powerful enough to be a match for Hephaistos.²⁸ Such implicit associations of Xánthos with Apollo are strengthened by connections with the god through Skámandros and the Semitic root, $\sqrt{\text{smn}}$ / $\sqrt{\text{šmn}}$.

4. Si-in ξύν, σύν "with." Nearly all Greek prepositions have clear Indo-European etymologies. The Egyptian etymology of *káta* was discussed in the last chapter; the only other exception is *xyn* (H) or *syn* (H) "with." Some Indo-Europeanists have attempted to place it with *sem,

“same.” Most, however, recognize that this is impossible because of the shift *s>h* and because of what seems to be older writing with *xi*. Chantraine preferred to reconstruct a **ksu* (dropping the final -*n*). apparently confirmed by the discovery of *ku-su* in Linear B. While explaining the survival of the sibilant, this approach makes it difficult to relate to any potential Indo-European cognates beginning with *s-*.²⁹

Given the evidence above, it would seem reasonable to look for a loan from a fricative sibilant. The candidate proposed here is the Eblaite *śt-in* “movement to, up to.” The phonetic problem with this is the nature of the Eblaite /*s*/. As stated above, I am inclined to believe that in Proto-Semitic /*s*¹/ was /*s*/ rather than /*š*/ as it is conventionally rendered. This is strengthened by the Gannan Gurage preposition *sən* “until, up to, as far as,” which Wolf Leslau plausibly derived from a verb *sänä* “to arrive, reach.”³⁰ Fabrizio Pennacchietti, however, sees cognates in epigraphic South Arabian as *s¹n* or *s³n* and in Qatabanian and Minaean as *s²n*. Nevertheless, despite the great uncertainty about the value of the Eblaite /*s*/, it was unlikely to have been a clear /*s*/.³¹

The other phonetic problem is the lack of a final -*n* in the Linear B *ku-su*. It would have been difficult, however, to represent this letter in the syllabary. Thus, there is no reason to doubt that it was present well before it is attested in alphabetic Greek.

The semantic problem is not insuperable. First, it should be remembered that Classical Greek had an Indo-European word for “with” in *méta*, which survives in Greek today as *me*. The division between “with” and “up to” is bridged by the sense that on arrival one is “with.” Interestingly, the South Arabian forms cited above all had *ʿd* “up to” as a prefix.

5. Śnē> ξένος “hated stranger.” The Greek stem *xén(w)o-* refers to foreigners or guests. Professor Calvert Watkins breaks up the *k* and the *s* in *x* and sees *xénos* as “the zero grade of the root *ghos”—English “guest” Latin *hostis*.³² Watkins’s claim is remarkable because, although traditional among Indo-Europeanists, it has been rejected by the lexicographers.³³ Even Julius Pokorny, ever eager to find Indo-European word families, sees the connection between *ghos and *xénos* as “hardly believable.” Frisk writes that the connection is “only possible through a mechanistic and arbitrary dissection.” Chantraine is equally dismissive. Within Indo-European, it is, as Frisk states, “isolated.”

Jasanoff and Nussbaum scored a point against me and my mistaken

reference to a Mycenaean form *kesene-*, which is in fact an alternative spelling for “foreign textiles.” They are quite right to claim that the Linear B forms all contain a *w*, which indicates a stem *xenwo-* not *xeno-*.³⁴ They have not, however, taken in the argument, made by Lejeune and Levin, that in early times *xi* probably represented *khs* rather than *ks*, with the consequent articulation of *kese* etc.

In most cultures “foreign” and “foreigners” are usually seen as impure or hostile. For instance, “to welsh” is an English word for “to cheat,” and the Semitic root $\sqrt{\text{gnb}}$ is used for “foreigner” in Arabic and “thief” in Canaanite and Aramaic. Therefore, the construct infinitive of $\sqrt{\text{sn}} >$ “to hate,” $\acute{\text{śnō}}$ “enemy, foe” fits *xénos* or even the reconstructed **xenwo* well in both phonetics and semantics. It would seem to the credit of Greek culture that *xén(w)o-* developed or retained such hospitable and positive connotations.

6. $\sqrt{\text{srp}}$, $\acute{\text{sārap}}$, $\acute{\text{sārāp}}$ σκορπίος “stinging beast.” The Phoenician form is a reconstruction of the words attested in Hebrew and Aramaic: $\acute{\text{sārap}}$ “burn” and $\acute{\text{sārāp}}$ “fiery venomous serpent.” Also in this group are **σκορπίος** skorpios (5) “scorpion” or *rascasse* “Mediterranean fish” with poisonous spines (essential for bouillabaisse).³⁵ Both Frisk and Chantraine recognize the word as a loan from a hot country. The correspondence with /sk/ indicates that the word was taken after Phoenician /s²/ -/ś/ had merged with /s¹/ -/š/. As mentioned above, in Hebrew and Aramaic /s²/ -/ś/ merged with /s³/ -/s/. Thus, one finds the Greek **σέρφος**, **σύρφος** (5) “gnat with sharp sting.” Neither Frisk nor Chantraine provide an etymology for these. I will discuss the name of the island Seriphos in Chapter 20.³⁶

LATERAL FRICATIVES

While it is possible that Nostratic and Khoisan had lateral fricatives /ɬ/, a sound comparable to the Welsh /ll/, Proto-Afroasiatic undoubtedly possessed them.³⁷ Indeed, four variants have been proposed for Proto-Chadic.³⁸ To return to Semitic, I should now like to investigate /s²/ and $\acute{\text{śn}}$ as derived from a Proto-Semitic /ɬ/. Modern South Arabic languages still retain /s²/, a reflex of /ɬ/. The oversimplified chart given above fails to indicate that, although in general /s²/ came to be pronounced as /ś/ in West Semitic, the Arabic letter *ḏād* still represented an emphatic /ɬ/ well into the First Millennium CE.³⁹ Furthermore, in Hebrew and

Aramaic /s²/ retained its independence as *śin* until less than a thousand years before that. In Phoenician, as stated above, it merged into s¹-š. The linguist Richard Steiner has demonstrated that before that in Phoenician and for a longer period in Hebrew and Aramaic s²-ś was heard by non-Semitic speakers alternatively as /s/, /ls/ or, simply, /l/. The best-known example of the second is the Hebrew *bāśām* being rendered as **βάλαμον** (4) “balsam.”⁴⁰ Another is the Hebrew *Kāśdyīm*, the people rendered *Kaldu* or *Kaldū* in Assyrian and **Χαλδαῖοι** in the Septuagint.⁴¹

1. *lph, śph sήπομαι, sήψις, σαπρός, λέπω, λεπρός “scab, scale.” The Canaanite root √**śph**, later √**sph** means “bark, skin, thin cover, eruption, scab.” Thus the Bible contains the words *sapahat* “scab,” *mišpāhāt* “long veil,” and *śipha* “smite with scab.”⁴² Greek has a prolific family with similar meanings and their extension “rotten.” For instance, **σήπομαι** (H) is “to make rotten, mortify”; **σήψ**, **σήπος** is “poisoned wound” and **σαπρός** “rotten, old.”⁴³ Chantraine states that the etymology is “obscure.” He rejects the attempt to relate it to the Sanskrit *kyāku* “mushroom”!

A parallel cluster is that around **λέπω** (H) “scale.” These include **λεπρός** “scaly, rough, leprous” and **λεπτός** (*repoto* in Linear B) “diseased” but also “fine, thin,” said of skin etc. Pokorny, Frisk and Chantraine, with some hesitation, see these as belonging to the Indo-European root from which the English “leaf” derives. The Indo-Europeanist Robert Beekes is not convinced and sees the stem as coming from the substrate.⁴⁴ While the Indo-European and Semitic sources may have intermingled, given the parallels with rot, disease and scab—as well as the fact that the Canaanite forms began with the fricative lateral *śin*—I am convinced that these Greek clusters alternating initial /s/ and /l/ ultimately derived from a Semitic root √**l/p(h)**.

2. la>, śeh sa, ra λεία, l̥(w)m, λάος “livestock, people.” Orel and Stolbova postulate two Afroasiatic roots *la>/law- “cattle” and *ša “cow, bull.”⁴⁵ Ehret plausibly unites them and reconstructs a Proto-Afroasiatic form *lō> “domestic animals,” singular *lō>w. He finds this attested usually as “cattle” in Chadic, Cushitic and Semitic.⁴⁶ In Semitic the /l/ appears with both reflexes, the Canaanite, *śeh*, Arabic *šaʿt* and Akkadian *su>um* “sheep, goat.”

In Arabic *laʿat* and *līʿat* are words for “cow.” The latter is generally linked to the Hebrew name *Lēʾah*. There is also the collective Proto-

Semitic *ḏoʔn reflected in the Canaanite ʒoʔn “small cattle, goats.” This would seem to derive from an emphatic /ḏ/ with the ending -n found as a plural marker in a number of Semitic languages.⁴⁷

Linear B had two signs *sa* and *ra* both meaning “sheep, goat.” In Homeric Greek, one finds λῆϊς, which means either “booty or spoil, mostly cattle” or simply “cattle or stock.” There are many dialectical and other variants, λεία, Ionic λῆϊη, Doric λαα. On the face of it, such variety would suggest loaning. Nevertheless, Pokorny associated it with a motley group of words, including the Latin *lucrum* “gain, profit,” the Slav *loviti* “hunt,” the Old Irish *log* “reward” and the Gothic *laun* with the same meaning. Frisk ducks the question and Chantraine, states forthrightly, “no etymology.” In the absence of serious competition, *leia* would seem to come from *l̥eʔah.

3. √l̥>m, rawo λαῶς “people.” *Leia* for which Chantraine postulated an original *λαῖα as “herd” may plausibly be linked to λαῖός. This link is helped by the attestation of the Mycenaean *rawa*, *rawi* and *rawo*, which he joins to reconstruct as *λαῖός, *Laῖós* “simple people,” as opposed to chiefs, and “assembled in multitudes.” Thus there are close semantic and phonetic parallels between the two.

Lāón would seem to come from an extension -m on the Afroasiatic *la>/law.⁴⁸ The Afroasiatic root *līm* “big, many” is found in Semitic, West Chadic and Highland East Cushitic.⁴⁹ In Akkadian, *lim* is “many”; in Ugaritic *l̥m* and in Hebrew, *l̥ōm*, mean “people.” The Arabic *laʾama* means “bring together” but it also means “base, lowly.” With these meanings there are also the forms *luʾm*, and *laʾim*. The Canaanite consonantal structure is √l̥>m, or √l̥>wm. The possibility that the letter *w* indicated rounding of the previous consonant was discussed in Chapter 5.⁵⁰ In this case, the word can be reconstructed as *la>wom.

As Samuel Bochart pointed out in the seventeenth century, the Hebrew *l̥ōm* is the probable origin of the Greek λαῶς.⁵¹ An earlier *la>wōm provides an excellent phonetic parallel for the accusative λαόν. There is, of course, no difficulty with the alternation m/n as Greek only tolerated final -s and -n. It is interesting to note that in the *Iliad* 75 of the 247 occurrences of *laῖós* are the accusative singular *laῖón*. A further 78 are in the genitive plural *laῖón*. One would not expect so inert a body as the Homeric “people” to be attested in the nominative. Thus, it is no surprise to find only 25 examples of the singular *laῖós* and 36 of the plural *laῖói*. What is surprising is how seldom the genitive singular *laῖού* and

accusative plural *lāou̯s* appear: twice and 13 times, respectively. Even disregarding these discrepancies **la^wōm* provides a better phonetic basis for an etymology for *lāós* than its Indo-European competitors. Frisk proposes a relationship with the Old High German *liut* “people.” He continues, however, “in contrast to the synonyms *δῆμος* and *στρατός*, *λᾱ(F)ός* which is never properly at home in Ionic and Attic, has no Indo-Germanic etymology, but is nevertheless an ancient inheritance.”⁵² Chantraine is not impressed by this curious compromise or convinced by “any of the hypotheses given in the dictionaries.” Furthermore, he is not persuaded by the claim that it derived from the Hittite *lahḫa* “war.”

SHELTERED /s/ sC /s/ BEFORE
CONSONANTS

1. √Spd “mourn, wail, smite the breast” σπεύδω “zealous” σφόδρα “vehement” σποδός “ash.” The last three sections of this chapter will cover words in which the initial s- is unproblematic in Greek because it is immediately followed by another consonant.

In Greek a curious group of words has similar sounds but very disparate meanings. These include *σποδός* (H) “ash,” *σποδέω* (5) “to pound, beat,” *σπεύδω* (H) and *σπουδή* (H) “haste, effort, zeal,” *σφαδάζω* (5) and *σφύζω* “to agitate, convulse,” *σπάω* (H) “to tear out hair.” From these come the nouns *σπαδών* (4) and *σπασμός* (5) “spasms,” *ἄσφόδελαι* (H) “the flowers that cover the meadow of hell” and, finally, *σφεδανός* (H) and *σφόδρα* (H) “violent, vehement.”

Pokorny and Chantraine find cognates for *speúdō* and *spoudeō* in the Lithuanian *spáusti* from reconstructed **spáudti* with a derived present *spáudžiu* “to wipe out, press, hurry.” This linking would seem plausible except the lexicographers are unable to find etymologies for any of the others listed above. These are much more convincingly explained as deriving from a single Semitic root.

Although not found elsewhere in Afroasiatic the √spd is widely attested in Semitic: *sipdu*, *sapādu* or *sípttu* in Akkadian, *spd* in Ugaritic and, with metathesis, as *sdf* in Amharic. All of these have meanings “to wail, lament, mourning, dirge.” The form is widely attested in various forms in Hebrew, including the construct infinitives *səpōd* and *lispōd* or *lispōd*. As in the modern Near East and eastern Mediterranean, mourning was a passionate affair in ancient times. Men, and particularly women, ex-

pressed themselves loudly without fear or restraint. They pulled out their hair (*spáō*), beat their breasts (*spodēō*), and covered themselves with ashes (*spódoi*). All were accompanied by spasms, violence and vehemence *sphedanós* and *sphódra*.

The alternation *d/dr* here fits into a pattern widespread in both inherited and borrowed Greek words. In some cases, as mentioned in Chapter 8, the form seems to be the result of borrowings before and after the Egyptian /3/ lost its liquid value.⁵³ In other cases, such as this one, it probably derived from uncertainty within Afroasiatic in general and Semitic in particular between /d/ and /dr/.⁵⁴ In any event there is no reason to resort to the mysterious Caland's "law," which Alan Nussbaum effectively dismantled in his Ph.D. thesis.⁵⁵

Frisk and Chantraine agree that *asphódelos* is a loan from an "unknown origin." I see it as belonging to this cluster, perhaps meaning "unmourned."

2. √Spk σφάζω "sacrifice by letting blood." A causative /s/ is found throughout Nostratic from Ancient Egyptian to modern English, see "wipe/swipe," "melt/smelt," "fall/spill" and even part/split.⁵⁶ In Canaanite there is a root √pkk *pākāh* "to trickle." Spk means "to make trickle." It was used for libations poured onto the ground, frequently with the sense of shedding blood. It is not possible to explain the vocalization with any precision but in Hebrew the infinitive construct is *səpāk*.

The Greek stem *sphag has many important derivatives. The Linear B *sapakterija* has been plausibly identified with **σφακτηρία** "sacrificial victims." The basic meaning of *sphag is "to cut the throat, and let the blood pour out." Frisk denies the previous etymological proposals and Chantraine states simply "no plausible etymology."

3. √špl σπήλαιον, σπέος "low, deep, cave." The Greek words **σπήλαιον** (4) and **σπέος** (H) both mean "cave." Chantraine argues conventionally that they must be connected "in one fashion or another." This variation and the absence of any Indo-European etymology indicate a loan and the best candidate is the Semitic √spl "low," found in the Ugaritic *shpl* "that which is below something" and in the Hebrew *šāpāl* "low, deep" and, metaphorically, "humiliated." In addition, *šəpēlāh* is the "lowland." The phonetic match is good and the semantic one passable given the near certainty of a loan.

CONCLUSION

In this chapter, I have tried to untangle some of the complications arising from the shifting nature of Semitic sibilants and their consequences on loans into Greek over the millennia of contact with Semitic speakers. The pattern of borrowings into Greek from the Semitic š and ś is indeed complex, but I hope that I have been able to convey some of the coherence that I am convinced lies behind it.

CHAPTER 14

MORE SEMITIC LOANS INTO GREEK

INTRODUCTION

When I began this project in 1975, I focused exclusively on Semitic loans into Greek, that is to say I was unconcerned with Nostratic, with Semitic loans into PIE or with Egyptian loans into Greek. By the mid-1980s, when I wrote the first drafts of what became Volume 1; I had realized that the first two factors could also explain parallels between West Semitic and Greek. By this time, I believed that some 20 percent of the basic stems in the Greek vocabulary came from West Semitic and an equal number from Ancient Egyptian. Further research made me modify this prediction. While I still maintain the overall figure of 40 percent, I have changed the proportions within it. I now estimate that there are rather fewer Semitic loans—some 15 percent of the Greek vocabulary—while there are more from Egyptian—around 25 percent. It is possible, however, that the numbers are skewed by the many obscure Greek words only attested in Egyptian papyri, thereby introducing local terms. Had more been preserved in the Levant, the proportions might well be better balanced.

Another reason that this volume pays rather less attention to Semitic loans is that, unlike the situation with the Egyptian, considerable work has already been carried out on the former. In Chapter 7, I set out a history of the study of Semitic loans into Greek.¹ I should reiterate that

over the past forty years Cyrus Gordon, Michael Astour, Saul Levin and John Pairman Brown have carried out excellent research in this area. With few exceptions, however, these scholars have limited their lexical research to the bounds of the third criterion set out by Michel Masson and attributed to Heinrich Lewy: “He threw out of his list, abstract or too broad-ranging nouns, adjectives and verbs.”²

While I do consider some of the words for concrete luxury and other items considered appropriate for “Semites,” I see no reason to treat them exhaustively. In general, these etymologies have been established with far more scholarly precision than I could ever muster. Even elsewhere, I have merely followed Professor Levin in examining the words of fundamental syntactic importance, *autos* and the definite article. In this chapter I shall concentrate precisely on the semantic region that Lewy and Michel Masson considered taboo: “abstract or too broad-ranging nouns, adjectives and verbs,” following the letter order of the Canaanite alphabet: >, b, g, d, h, z, ḥ (h), t, y, k, l, m, n, s, ’, p, š, q, r, š, t.

1. √b> Βαίνω “walk, stand, come, go.” Chantraine takes the orthodox position set out by Benveniste that *bainō* (H) comes from an Indo-European root *g^wem-/g^wm̥ or *g^wəṁ₂/g^wə₂.³ The alternation was necessary to allow for the presence or absence of the final *-inō* of the stem. Seeing it as fundamental allows an association with the Indo-European root found in the Gothic *qiman* and English “come.” However, *-inō* is a common suffix and all other tenses indicate a stem bē<bā, hence the reconstruction of the hypothetical root *g^wəṁ₂/g^wə₂, with only speculative Sanskrit associations.

Orel and Stolbova reconstruct an Afroasiatic root *ba>-/baw-/bay “to walk, go.”⁴ This is found in every branch of the super-family and almost every Semitic language. In Phoenician it is b>, in Hebrew b(w)>, in the perfect of that language bā>. Thus, in contrast to the confused and contradictory Indo-European etymologies for *bainō* the Afroasiatic, through Semitic, is quite straightforward.

2. √dl(1) Δειλός, Δούλος “inferior, weak, dependent, slave.” Julius Pokorny accepts the conventional link between δούλος Mycenaean *doero* δειλός “weak, cowardly” and δεῖδω “I fear” and ultimately *duo* “two.” Even if one recognizes a relationship between *deilōs* and *deídō*, the proposed Indo-European etymology is highly insecure. Presumably for this reason, Frisk and Chantraine agree that *doúlos* is a non-Indo-European

loan into Greek. Not surprisingly, they propose, without the slightest evidence, a derivation from Carian or Lydian.

Jasanoff and Nussbaum strongly object to my glossing *doûlos* as “client,” stating that it only meant “born slave.”⁵ By contrast, Chantraine in his detailed description of the word’s semantics writes, “The uses . . . do not show that the word means ‘slave from birth.’ The word has a general sense and its frequent use on Mycenaean tablets does not provide precise meanings.” Once again, Jasanoff and Nussbaum have succumbed to the Indo-Europeanists’ occupational hazard of misplaced precision.

Bomhard proposes a Proto-Nostratic root **dulʷ/*dolʷ* “to dangle, hang, swing” attested in Dravidian, PIE and Proto-Afroasiatic. He sees this abundantly attested in Semitic.⁶ Orel and Stolbova list an Afroasiatic root **dal-* “to be weak or tired” found in Omotic, Lowland East Cushitic and, with a double “ll,” in Semitic.⁷ Whether or not the two roots are related, a plausible link between two meanings is the sense of “dependent.” The semantic parallel with *doûlos* “someone in servitude” is quite strong, especially in the absence of an Indo-European competitor.

The “primary” meaning given for *deîlós* in most dictionaries is “cowardly,” but even in Hesiod and Homer it is much more frequently used in the distantly related sense of “miserable, wretched, vile, lowborn.”⁸ The lexicographers’ preference is most easily explained by the fact that the meaning “cowardly” fits better with the verb *deídō* “I fear” to which Frisk, Chantraine and others (including Jasanoff and Nussbaum) want to attach *deîlós*. The semantics of the more frequent usage favors the Semitic over the Indo-European etymology.

Now, turning to the phonetics, Jasanoff and Nussbaum maintain, and I agree, that the initial in *doûlos* was *d^w*. They go on from that statement, however, to claim the Mycenaean form *doero* indicates that *doûlos* derived from a “**do(h)elos (<*doselos?)*.” The brackets Jasanoff and Nussbaum put around the earlier hypothetical form give a spurious solidity to the unbracketed **do(h)elos*. John Chadwick proposed a sequence similar to *doelos <(dohelos?)* to make a connection with *dahā*, “man” in Khotanese (one of the many Iranian languages) and the Sanskrit *dāśah*, equally “man.” Apart from the semantic looseness, the actual, as opposed to the hypothetical, forms provide no explanation either for the /o/ or “rounding” or for the final /r/ in *doero/doûlos*.

Explaining the “rounding” from Semitic also faces difficulties. The existence of a phoneme *d^we* in the languages represented by Linear B and Linear A is strengthened by a sign for that sound. This, however,

was not used in *doero*. The presence of rounded velars and labials in Semitic was discussed in Chapter 5.⁹ The evidence for rounded dentals is less clear, but a possible example can be found in the Hebrew verb $\sqrt{h}tm$ “to seal, complete.” As regular verbs, in many *qal* forms the final syllable of *h̄tm* “seal” contains a back vowel: imperfect *yahtām*, imperative *h̄ātām* or *h̄ātōm* etc. *H̄tm* appears to have derived from the Egyptian *h̄tm* with the same meaning. Nevertheless, the initial *h-* suggests that of the Greek **ἑτοιμός** (H) “ready, sure, certain,” derived from Canaanite rather than Egyptian. As argued in Chapter 5, /oi/ in Greek is an indicator of a rounded consonant in Afroasiatic¹⁰ and suggests the existence of rounded dentals in the super-family.

Thus, it is quite possible that *dl(l)* was sometimes rounded. In the basic sense of “hanging, especially in water,” $\sqrt{dl}$ is found in the forms *dālāh* “to draw water” and *dālī* “bucket.” These meanings involve dangling ropes that could possibly lead to entanglement[?]. Even the name of the entrapping temptress Delilah, would seem to be linked to the Arabic *dalāl* “coquetry” and could be derived from $\sqrt{dll}$. *Dll* would also seem to be reflected in plausible Greek loans with the vowels /o/ and /e/ **δολός** (H) “fish trap, trick” with no Indo-European etymology and **δέλεαρ** (H) “fish by bait, trap.”¹¹ Thus, an origin for both *doûlos* and *deilós* in a hypothetical Semitic form *d^wero would be perfectly plausible.

Nevertheless, neither the two Indo-Europeanists nor I have a good explanation for an initial *d^w. The reasons for preferring the Semitic etymology for *doûlos* and *deilós* are, first, that it provides an excellent semantic fit, while derivation from an Indo-European word for “man” is vague. The second reason is phonetic: the Semitic, unlike the Indo-European, etymology provides an explanation for the /l/. The /l/ and the semantics of the words lead me to believe that *deilós* with a basic meaning “wretched miserable, low class” should be separated from *deidō* “fear” and linked to *doûlos* “slave.”

3. $\sqrt{zwd}$ ψεύδομαι “to be pretentious or false,” $\sqrt{zwr}$ ψώρα “loathsome,” $\sqrt{zl(l)}$ ψάλλω “twang.” The transcription of the Greek letter ψ as /ps/ is generally uncontested.¹² Confusion with other sibilants, however, makes the equation less clear. See, for instance, the alternations $\psi\eta\rho\acute{o}s/\xi\eta\rho\acute{o}s$ “dry” and $\psi\omega\mu\acute{o}s$ “morsels of food” and $\zeta\omega\mu\acute{o}s$ “fatty sauce.” I have argued elsewhere that the letter ψ itself comes from a Semitic /z/ *zayin*, and that the value /ps/ came from analogy with /x/ *xi* and the frequency of the Egyptian *p3*+ sibilant.¹³

Since no clear-cut cases show words with Indo-European roots beginning with *psi*, one should look for loans. Here the Egyptian pattern provides an important cluster with the straightforward values *p+s* or *p+š*.¹⁴ Many words with this initial letter, however, cannot be explained in this way. Some may derive from the Canaanite /z/ as the origin of the letter may suggest.

The verb **ψεύδομαι** (H) and the nouns **ψεύδος** (H) and **ψυδρός** (6) are all concerned with lying and pretentiousness. Although they can go no further in Indo-European, Frisk and Perpillou link it to the Armenian *sut* “lie” and, therefore, renounce any attempt to see it as deriving from *ps*. I agree, but see it as coming from the Canaanite *zîd*, *zûd* “presumptuous, insolent.” For the alternation d/dr in *pseûdos* /*psudrós* see Chapter 13.¹⁵

Another example of a Greek word beginning with *psi* deriving from the Canaanite /z/ is the word **ψώρα** (3) “itch from scab” from the Hebrew *zûr*, *zûr* “loathsome of flesh.” Neither Frisk nor Perpillou have an etymology for *psôra*.

Another Greek word with initial *psi* and lacking an Indo-European etymology is **ψάλλω** (3) “to pluck the strings of an instrument.” This word first appears in the Septuagint, so not surprisingly it does have a plausible Semitic etymology: the root $\sqrt{\text{zll}}$ “to shake, agitate.” This form is found in the biblical *hapax zalzal* “tendril,” “that which is shaken.”

Thus, here we have three examples of a correspondence of the Semitic /z/ to the Greek **ψ**.

4. ἡַyyîm Αἷμα “life/blood.” As most Americans are aware without knowing it, the Canaanite word for “life” is *ḥayyîm*. This appears in Ugaritic and Phoenician as well as biblical Hebrew. In Canaanite, as in other cultures of Semitic speakers, “life” was closely associated with “blood.” One may disagree with the progressivism of the radical nineteenth-century scholar of religion, Robertson Smith, but there is no reason to challenge his conclusion when he wrote in *The Religion of the Semites*, “When men cease to eat raw or living flesh, the blood to the exclusion of the solid parts of the body, comes to be regarded as the vehicle of life.”¹⁶ For this reason that blood must be offered to the gods and not consumed by humans. Thus, draining blood has always been an essential part of Jewish and Muslim sacrifice and, hence, dietary laws.

According to R. B. Onians, the identification of blood with life was shared by the ancient Greeks.¹⁷ In Homer *haîma* has the meanings of

spirit or courage as well as blood. With such close connections between blood and life in both cultures the semantic fit between *ḥayyûm* and *haîma* is very strong.

The only possible phonetic objection would be to argue that as the genitive of *haîma* is *haîmatos* and *haimato* is sometimes used in compound words, the final -t should be included in the stem. No doubt final consonants that are absent from the nominative but present in other cases can frequently belong to the root. This, however, is not always the case. Few Indo-Europeanists would accept as fundamental the /t/ in *dóru/dóratos* “tree”; *dōma/dōmátos* “house”; *hēpar/hēpatos* “liver”; *kūma/kūmatos* “wave”; or *húdōr/húdatos* “water.” There would seem no reason to except *haîma* / *haîmatos* from this group.

The word has no Indo-European etymology. Chantraine maintains that “there is no common word for blood in Indo-European.”¹⁸ By contrast, Frisk suggested that *haîma* was an outside loan replacing the Indo-European root **ēsr*, which is represented in Greek by *éar*. *Haîma* does not appear in Linear B, but it is well established in Homer. Therefore, I see no reason to rule out a loan in the Bronze Age.

When I proposed this etymology in Volume 1, it was endorsed by Gary Rendsburg, who wrote, “A most interesting proposal of Bernal is Greek *haima* “blood,” as a loan word from Phoenician *ḥayyûm* based on the well-known connection in Semitic religion between the two. This is an especially attractive suggestion because the two forms reflect the same diphthong *ai/ay*.”¹⁹ Jasanoff and Nussbaum do not take up the case of *ḥayyûm-haîma*.

5. *Kāl “female in-law” kall “bride,” √kālal “complete, perfect,” καλ(λ)ός “beautiful.” Orel and Stolbova reconstruct an Afroasiatic root **kāl* “female in-law”²⁰ found in Semitic, South Cushitic and West Chadic. In Semitic they cite **kall* “daughter-in-law” and “bride.” This is only one of two roots, √*kl*, in these languages. The other √*kl* or √*klh* is of “completion” either in the sense of “exhaustion” or that of “perfection.” In the latter sense it becomes confused with **kallāh** “bride.” The Aramaic *kālilā* is “crown” as is the Arabic *kalil*. *Akālīl* is both “crown, wreath” and “wedding ceremony.”

In Greek **καλ(λ)ός** (H) is “beauty” and the adverb is **καλόν** or more frequently **καλά**. Chantraine, who concludes that the etymology is “unknown,” places great emphasis on a Boiotian **καλφός**, which he sees as the original form. He cannot, however, explain the frequent doubling or

gemination of the lamda. The digamma is best explained as a “darkened” /l/. The gemination clearly comes from its presence in the Semitic etyma.

6. Kal.ga, Halaqa, ḥālāq “smooth, bright” χαλκός “copper” ἡλέκτωρ “amber.” In Chapter 4, I mentioned Gamkrelidze and Ivanov’s derivation of the PIH root *r(e)ud^h “red, copper, ore” from the Sumerian *urudu*.²¹ One term for “strong copper,” possibly “bronze,” is *urudu. kal.ga*. Given the interchange between Sumerian and Semitic it is plausible to suppose that *kal.ga* is related to the Semitic root √hlq “forge.” Orel and Stolbova reconstruct an Afroasiatic root *ḥalak/ḥaluk “to give birth, create,” but this is largely based on Semitic.²² The chief example is the Arab *ḥalāqa* “to create, shape, mold, forge, fabricate, make smooth.” In Hebrew *ḥālāq* means “smooth, slippery and bright stones,” and in an obscure line from Isaiah, the Hiphil participle *maḥālāq*, as a person, is translated in the Septuagint as *khalkéis* “coppersmith.” Modern commentators translate it as “smoother, smelter, or hammerer.”²³

The Eblaite gloss on the Sumerian *urudu* was *kāpālu/kāpāru* and the origin of the Latin *cuprum* etc. from the West Semitic √kpr was set out in Chapter 4.²⁴ The Greek word for the metal, however, was χαλκός *kako* in Linear B. Chantraine denies an etymology from *kal.ga* because it is only an epithet of *urudu*. He, therefore, proposes that it was a very early borrowing from an undetermined civilization. A form of the Semitic √hlq would seem a plausible bridge between *kal.ga* and *khalkós*.

The Greek κάλχη (6)(χαλκή) “murex,” the source of Tyrian purple, indicates that the color of copper and bronze had not rubbed off √hlq. Chantraine sees the metathesis of aspiration and the absence of an Indo-European etymology as evidence that it is a loan, of “unknown origin.” Then, there is the word χάλιξ “pebble, gravel.”²⁵ An early form *ḥālāq or ḥālāq “smooth stones,” with a vocalization of the known type CāCiC, provides a plausible etymology for *khálīx*.

There also appear to be loans from the later Canaanite √hlq. First, there is ἡλέκτωρ (H) “brilliant” and ἡλεκτρον (H) “alloy of gold and silver, amber.” Chantraine sees -tōr as an Indo-European suffix but cannot find the root. Frisk simply states “unexplained.” Finally, with aspiration there is ἐλίκων (H). Although -ōps is clearly “eyes,” the meaning of the stem is obscure. The general sense of the word as a whole is “brilliant black eyes.” This provides yet another Greek interpretation of the Semitic root √hlq-√hlq.

7. Lat, Lt Λήθη, Λητώ “skin, cover, oblivion, shrouded.” Orel and Stolbova reconstruct an Afroasiatic root *lat “skin” found in Egyptian and West Chadic.²⁶ With an emphatic /t/ *lt* is widely attested in Semitic. In various Gurage languages and Amharic *ləṭä* and *laṭä* mean “bark” of a tree and “to bark” a tree. The Arabic *laṭat* is “to cleave or stick to a thing, cover with clay.” The Hebrew *lāṭat* is “to cover” and *lāṭ* or *lāṭat* is “secret, mystery.” Vocalized with /i/, there is the Akkadian *litu* or *letu* “covering.” The root also occurred with back vowels as in the Hebrew *lōt* and *lūt* “to wrap closely, envelope.” Finally there is *lot* “myrrh, laudanum,” which would seem to have developed from the veiling or shrouding effects of drugs.²⁷

Greek has a similar cluster. The Linear B word *rita* has been plausibly associated with the Homeric λῖξ and λῖτα “fine linen,” to cover a corpse. Bérard derived this *lita* from *lōt* but now there is an even closer parallel in *litu*.²⁸ In Homeric and later Greek a large cluster of words share the stems *lath-*, *lathr-* *lāth* > *lēth-*. The most outstanding of these is λήθη (H) “forgetfulness, oblivion.” Chantraine subsumes this word under λανθάνω—with the present infix -n- “to make forget.” The cluster as a whole covers the semantic themes shroud, escape notice, oblivion, drugs, sleep and death. Suspicion that the group comes from a borrowing rather than from an Indo-European root has been roused by a similar but distinct word λήτο, which, according the lexicographer Hesychios, meant “hidden.” The name Λητώ, the divine mother of Apollo and Artemis, clearly came from this root in the sense of “veiled.”²⁹

The only possible non-Hellenic cognate is the Latin *lateō* “hide.” There are, however, difficulties with the final dental. The Greek -*th-* comes from PIE *dh/d, which could also be the origin of -*t-*. On the other hand, in Latin the *dh became -*d-*. Frisk, Chantraine, Ernout and Meillet provide complicated ways around the problem. It would be simpler to see both as borrowings from a third language, i.e. Canaanite.

In any event, *lateō* does not have the druggy associations of *lēthē*. Muss-Arnolt and Lewy agreed that the Canaanite *lot* “myrrh, laudanum” was the origin of the Greek λωτός (H).³⁰ Chantraine cautiously explains it as a “Mediterranean term of obscure origin.” A careful reader may have noticed that his explanation is often used to avoid attributing a Semitic or Egyptian origin to a Greek word. In this case, however, Chantraine is right, as there is also a plausible Egyptian etymology for *totós*, which will be discussed in Chapter 15. The Greek word would seem to derive from

a conflation of both the Semitic and the Egyptian sources. Here I shall focus on the Semitic.³¹

Lōtós was a name applied to many plants, mainly from Egypt and the Maghreb. The earliest and the most famous reference is the one in the *Odyssey* to the island of the *Lōtophagoi* “lotus-eaters.” No one doubts that their *lōtoi* were drugs inducing happiness and lethargy. It is striking that in this passage Homer twice uses *lōtos* in tandem with forms of *lanthanō*.³² Thus a major Greek lexical cluster, which includes the word for “truth, reality sincerity” ἀλήθεια “not hidden,” has a clear Semitic origin.

8. The √lq cluster “gather.” A Semitic biliteral √lq has the basic sense “gather.” This meaning goes in three directions: to gather things “to pick, collect, take away”; to gather people “to meet, enumerate” and to pick up ideas “to grasp, understand.” With different third consonants √lq covers a vast semantic region. In Akkadian, Aramaic, Syriac and Hebrew √lqt is to “pick up, glean.” In Arabic √lqn is to “grasp, understand” and, in the second derived conjugation, “to teach, dictate.” With various prepositions the Arabic *laqiya* can mean “to meet, obtain, recite, sing, give a lecture, make a statement on.” In Akkadian and Canaanite *lāqah* is “to take, pick,” “choose” but also “to receive instruction.” The Hebrew derived form *leqah* is “learning, teaching.”

Chantraine describes the basic sense of λέγω (H) as “assemble, pick, choose.” From this developed “count, enumerate,” then “tell, speak.” With the vocalization /o/ the root became λόγος (H) “words, tale, explanation, reason.” The parallels with the basic meanings in Greek and Semitic are striking. Those with the further elaborations are somewhat less so. Nevertheless, the parallels are sufficiently strong to suggest that they did not entirely result from the “internal” Greek developments that Chantraine suggests.

Further indications that λέγω was borrowed from *lāqah* come from Latin. *Legō* in that language has the same basic meanings of “assemble, pick, collect” as λέγω and *lāqah*. Ernout and Meillet point out, however, the apparent paradox that where λέγω is “to speak” *legō* is “to read.” The solution lies in a split in the Semitic meanings of “teach” and “dictate.” Dictation, a normal method of education in the ancient world, is both reading and speaking.

One reason why Latin emphasized reading is that for speaking the Romans had another borrowing from *lāqah*: *loquor*. Where λέγω and *legō*

went through a normal transformation of Semitic /q/ and Greek and Latin /g/, Latin, which retained the PIE /qu/, had the ability to render the Semitic *quf* more accurately and, in this case, did so.

Ernout and Meillet remark that just as *loquor* replaced *for, fari* (with a strong Indo-European etymology), it was itself replaced by the Christian term *parabolāre*. Thus, in both cases a formal word for teaching replaced a word for simple speech.

All that Pokorny, Ernout and Meillet and Chantraine can come up with as an etymology for λέγω and *legō* is the Albanian *mb-l'eth*, “I pick,” which has an attested palatal g. Ernout and Meillet do not accept any Indo-European etymology for *loquor*.

9. Nhr Nḥp- “fresh water and sea.” Orel and Stolbova reconstruct a Proto-Afroasiatic root *nihar “flow.” The only non-Semitic example they can find, however, is from the East Chadic language of Mokilko.³³ Nevertheless, it—and the substantive *nāhār* “river stream”—is well established in Asiatic Semitic. The Akkadian *nāru*, the Ugaritic *nhr*, the Aramaic *nahrā*, Arabic *nahara* and Hebrew *nāhār*.

The origin of the Latin river name *Nār*, the Umbrian *Nahar* from *nāhār*, was discussed above in Chapter 7.³⁴ There is a late word νηρόν (6CE) “water” from which comes the modern Greek νερό. The Semitic √nhr was not restricted to fresh water. In the Ugaritic pantheon ʾTpt Nhr “Judge Nahar” was an alternative name for the wicked sea god Yamm. This name provides a plausible etymon for Νηρεός (H) god of the sea and his daughters the sea nymphs, the Νηρηίδες.³⁵ Chantraine cites the early twentieth-century scholar Adolph Fick as linking the name to the Lithuanian *nérti* “dive,” with a long vocalization *nērōvé* “water sprites.” Two arguments can be made against this genetic explanation. First, the variations of the spelling Νηρηίδες and Νεαιρηίδες would suggest a loan. Second, *nērōvé* provides an inferior explanation for *Nēreús*.

10. √nwh, √nwh Ναίω, Νῶς “rest, dwell, dwelling, temple.”

As is true for English, the large number of homonyms in Greek are best explained by the number of linguistic sources the language drew upon. The same principle holds for close homonyms. Take for example *naĩō* “dwell”; *nāós* “shrine, temple”; *néos* “new”; *nāō* “flow”; *naūs* “ship”; *nóos* “perception”; and *néō* with the three meanings “swim, spin, heap up.” Inflexion makes the series even more confusing. Of these words, *néos* “new” and *néō* “swim, spin” are clearly Indo-European and *nāō* “flow”

may well be. Gamkrelize and Ivanov argue that *naús* “ship” is a loan from Semitic into PIE. I am more inclined, however, to accept Bomhard and Kerns’ proposal that there was a Nostratic root.³⁶ **N(η)έω** (H) *n(ē)éō* “pile up” has no Indo-European etymology and would seem to derive from the Egyptian *nwi* “collect, assemble.” The etymology of *nóos* “perception” from the Egyptian *nw* was discussed in Chapter 12.³⁷ This winnowing leaves *naío* “dwell” and *nāós* “shrine, temple.” An Afroasiatic root *nVwVq “rest” is found in West Chadic and Semitic. Orel and Stolbova postulate a Semitic root *nw found in the Akkadian *nāhu*, the Ugaritic *nwh*, and the Hebrew *nwh*.³⁸ *Nāwāh* is to “dwell or abide” and, from a related root √nwh, *nāweh* is a “dwelling.” With generous condescension Jasanoff and Nussbaum write that this word for “temple” is “connected by Bernal—correctly, as it happens—with the verb *naío* “I dwell.” They concede that “*neós* and *naío* happen to lack problem-free cognates in the other Indo-European languages.”³⁹ They object to my deriving these Greek words from Semitic because, they maintain, that the words “must” derive from a root *nas or stem *naswos.

Here again Jasanoff and Nussbaum and their predecessors have been trapped by the reification of their own imaginary constructs. No such forms are actually attested and the variety of dialect forms can equally well or better be explained as resulting from loans. Gary Rendsburg has pointed out that in Hebrew not only does *nāwāh* mean “dwell, abide” and *naweh* “dwelling, abode,” but also *naweh* is used with the specialized meaning “temple, shrine.”⁴⁰ With excellent semantic and phonetic correspondences of the Semitic etymology for *Nāós*, *Neós*, and *naío* and no Indo-European competitor, it is perverse to prefer a purely hypothetical construction.

11. √pʿl *poʿél*, Ποιέω “do, make” √pʿm, Παίω, Παύω “beat, stop.” Frisk and Chantraine agree that **ποιέω** (H) “to do, make” originally had a medial digamma *poiʿo and that it derives from an Indo-European root *kʷei, which is attested with a nasal in the Sanskrit *cinóti* “to pile up, arrange.” It would be fair to describe this conclusion as far-fetched in both phonetics and semantics. On the latter level, it is much simpler to derive it from the standard Phoenician, although less-frequent Hebrew, verb *pāʿal* “to do, make.” The vocalic structure o-e in *poiéō* corresponds exactly with the shape of the Canaanite present active participle. In this case, *poʿél*, which was frequently used verbally, although not as much as in later Hebrew where it has become the normal present

tense. The consonantal correspondence has two minor problems. First, there is the lack of /l/ in the Greek forms. The “darkening” or velarization of /l/, however, is an extremely common phenomenon in many languages.⁴¹ A second difficulty comes from the reconstructed digamma in *poiF oʷ. This too could be equally well or better explained as the reflex of an Afroasiatic ʿayin. The equivalence of ʿayin and w was discussed in Chapter 10.⁴²

The same principle holds with the verbs **παίω** (5) and **παύω** (H). The early twentieth-century grammarian of Greek E. Schwyzler attempted to link the two on the basis of a reconstruction of *paíō* as *pawíō. He saw *paíō* as a back formation of the aorist and future forms of *pawíō. He had no problem with the semantic differences between the two, seeing them both as coming from “striking someone to keep them away.”⁴³ Chantraine describes this damningly as “an ingenious hypothesis.” I do not believe, however, that it should be dismissed so easily. The semantic match between *paíō* and pʿm, the Canaanite for “to strike, beat” is exact and, to follow Schwyzler’s argument, that with *paíō* not far off. The phonetic difficulty is with the final -m in the Canaanite verb. /M/ appears in grammatical positions in the “middle” *paíōmai* and the passive participle *paíómenos* in the Greek verbs. Thus, it could well be that the /-m/ was seen as morphological and was, therefore, dropped from the stem. The lexicographers do not have an Indo-European etymology for either verb.

12. Qds Kûdos, Kûdörös, Kêdörös “apart, sacred, vile, sacred tree.” One of the best known Semitic roots is √qds, in later Canaanite, √qds “apart, sacred, vile.” Greek has a large cluster around **κῦδος** (H) and **κῦδρος** (H) with the same meanings of both “divine glory” and “vile.” The final -s of early Canaanite was taken into Greek as the marker of a type of neuter noun, in which all cases of the singular except the dative end in -s. The adoption of *kûdos* into the neuter gender, nonexistent in Afroasiatic, is an example of the importance of morphological determination of gender in the recipient language and the insignificance of a word’s gender in the original language.⁴⁴ Rendsburg has pointed out the strength of the phonetic parallel showing that “the Hebrew *qōdeš* ‘holy’ is a *u*-class segholate whose proto-form can be reconstructed as **quds*.”⁴⁵ Thus we have an excellent semantic and phonetic match.

Jasanoff and Nussbaum follow a conventional claim that *kudos* has a “perfectly good IE etymology: it is cognate with the Old Church Slavonic *čudo* (*gen. čudese*) “wonder, marvel.”⁴⁶ Here, in their eagerness to have a go

at me, Jasanoff and Nussbaum tripped over themselves, since they previously insisted that “there is nothing essentially ‘sacred’ or ‘holy’ about the Greek word.” By contrast, Chantraine insists on the divine aspect of the word and agrees that “the sense leads one to the Old Church Slavonic *čudo* . . . however, the Slav word would suppose a vocalism **qeu* [not found in the Greek *kudos*].”⁴⁷ Chantraine then turns to even less-likely Indo-European etymologies.

The Semitic alternation between holy and vile in $\sqrt{qds}$ would seem to be reflected in **κῦδος** “insult” and **κυδάζομαι** (5) “to insult.” Pokorny, Frisk and Chantraine, however, maintain that this verb was unrelated to *kúdos* and that it derives from a root found in the Slav cognate *kuditi* “cry, mockery.” There may well have been confusion here but given the Semitic ambiguity it seems likely that both sources were at play in this case.

The alternation **κῦςδος/Κυδρός**, like that between **ψεύδος** and **ψυδρός**, was discussed in *Black Athena Writes Back*.⁴⁸ With *-dr* and different vocalizations, there are a number of related Greek words and names. **Κόδρος**, legendary king of Athens, worshipped as a hero in classical times and the sacred **κέδρος** (4) “juniper, later cedar.” The temple at Jerusalem was erected under Phoenician supervision and was built of cedar. There is no reason to suppose that other Canaanite temples were constructed differently. The long-lasting timbers of the temple of Melqart at Cadiz, described by the Roman writer Silius Italicus, were almost certainly of the same material.⁴⁹ The likelihood that $\sqrt{qds}$ was used to refer to cedars is increased by the Egyptian word *qdt*, which Faulkner describes as “a conifer? from Syria.” The Syrian cedar was also known in Greek **κεδρελάτη** (1CE). On its own **ἐλάτη** (H) means “pine.” Frisk and Chantraine can find no satisfactory Indo-European etymology for it.⁵⁰ A derivation from the Canaanite and Phoenician form **ēlat* = Hebrew *ēlāh*, “lofty tree, terebinth” is far more probable.⁵¹

13. $\sqrt{Qal}$, **qôl, **qâhal** “speak, assemble” **βούλη**, **βούλομαι** “assemble, desire.”** Orel and Stolbova postulate an Afroasiatic root **qal-/qawal* “speak,” which in Semitic they relate to **qāl* “voice.” In Arabic *qāla* (*qaul*) “speak” usually refers to social situations: teach, advocate, confer, parley, wrangle, argue etc. There are two apparently related roots in Hebrew. First is *qôl* “sound,” usually applied to the human voice, sounds of animals, music and so forth but also of articulate speech, advice command. The second is *qâhal* “assemble” and the noun *qâhâl* “assembly,” specially convoked for political or religious purposes. The semantic

connection between *qôl*, and *qâhâl* is analogous to that between *parler* and *parliament*.

Turning to phonetics, the alternation in Semitic between $\sqrt{qwl}$ and $\sqrt{qhl}$ or *qol* and *qal* indicates earlier forms with a labiovelar $*q^{wal}$.

Many Greek words are based on the stem **βούλ-**. The most important are **βούλομαι** “desire” and **βούλη** “assembly, council.” No one doubts that they are related. The question is which was primary? The lexicographers assume it is from *boulomai* to *boulê*. Chantraine is, however, unable to set out a clear semantic passage in this direction. It is rather easier to go from *boulê* to *boulomai*. *Boulê* has the senses of “decision, council and counsel.” Chantraine points out that there are many derivatives around *βούλη* in the sense of advice, notably *βουλεύω* “consult, deliberate and propose, determine” which comes close to “desire.” Take, for instance, the verse from the *Iliad*: “Arkhelokhos, for him the gods [*βούλευσαν*] destruction.”⁵² The conventional translation is “proposed,” but the collective decision could be rendered “desired.” Thus it seems more likely that the semantic flow was from *boulê* to *boulomai*.

Boulomai is often paired with **ἐθέλω** (H) “to want, desire.” Chantraine distinguishes between the two, seeing *boulomai* as more active and *ethelô* as the passive “being inclined to, accept.” This idea fits an origin for *boulomai* from *boulê* as “collective decisions.” *Ethelô* has no Indo-European etymology but, despite the inability to explain the prothetic *e-*, a plausible Egyptian one could be from *tr* “respect, greet respectfully.”

Chantraine maintains that an initial labiovelar $*g^{wel}$ or $*g^{wol}$ is “certain.” Given the uncertainty about the voicing of the Semitic emphatics, an early derivation of the Greek *boulê* $< *g^{wol}$ from the West Semitic $*q^{wal}$ “call together, assembly” would seem plausible.

14. Qsm κόσμος “divination, arrangement.” This etymology was sketched out in Chapter 8.⁵³ As stated there, the basic meaning of the Greek stem *kosm-* is “to order, arrange” especially by a god or other figure of authority. In the passive it can mean “to be assigned.” Though not attested in Linear B, **κόσμος** and the verb **κοσμέω** “to set in order” are well established in Homer. Agamemnon and Menelaos were *kosmētore laôn* “commanders of people.”⁵⁴ In connection with Pythagoras, *kósmos* was used as “order of the world, universe.” Chantraine dismisses Frisk’s various proposals and writes that the “least improbable connection” is with the Latin *censeō* “to make a solemn declaration” and the Sanskrit

çamsati “he recites.” Aside from the semantic difficulties, the phonetics have both vocalic and consonantal problems.

The Semitic root $\sqrt{\text{qsm}}$ has a basic meaning “to cut, break, divide, allocate.” The Arabic *qasama* is “to divide, assign, especially of a deity.” In the tenth stem it is “to cast lots, seek an oracle.” In Early South Arabic *mqstm* is an “oracular decision.” The Hebrew verb *qāsam* was “to practice divination,” *qesem* and *miqsām* mean “divination” or “magic.” Given the evidence from Arabic, rejecting a meaning of “assign” in the Canaanite verb $\sqrt{\text{qsm}}$ does not seem reasonable.⁵⁵ The Greek vocalization does not provide a major obstacle as we know that a pattern Co/uCC existed in Ugaritic.⁵⁶ Thus, both the phonetic and the semantic distances between $\sqrt{\text{qsm}}$ and *kosm-* i are far shorter than those between *kosm-* and *censeō* or *çamsati*.

CONCLUSION

As I wrote at the beginning of this chapter, I have tried to avoid ground covered before by scholars with far greater expertise than mine. Therefore, I have avoided examining the Semitic origins for terms regarding luxuries and trade goods. Instead, I have looked at such fundamentals as blood and bronze and such centrally important verbs as *bainō* “to go”; *legō* “to speak”; *poiēō* “to make”; and *naīō* “to live” and at such religious and philosophical terms as *kalos*, *kudos* and *kosmos*. The point of this and the preceding chapter is to claim that Semitic influences on the Greek language and, hence, Greek civilization as a whole cannot be restricted to what the stereotypical Jews of the past *could* have provided. Rather, we should consider what they did, in fact, contribute.

CHAPTER 15

SOME EGYPTIAN AND SEMITIC SEMANTIC CLUSTERS IN GREEK

Previous chapters have been largely concerned with phonology, that is attempts to find systematic phonetic parallels among Egyptian, Semitic and Greek words or roots. In this and the next three chapters the focus will be on meaning. As mentioned in Chapter 14, previous scholars have set out well various loans from Semitic into Greek, although they have largely restricted their investigations to concrete nouns.¹ The list of Greek words with Egyptian etymologies has been far more exiguous. Apart from the work of Peter Viktorovitch Jernstadt and Constantin Daniel in eastern Europe, proposals of borrowings from Egyptian have generally been restricted to the obviously exotic.² Therefore, before considering verbal clusters in other semantic regions, it would be useful to examine probable or possible Greek borrowings from Egyptian of some practical items and processes in civil life: agriculture, cooking and medicine. Other areas, such as music, textiles and metallurgy, could equally well have been included, but the aim here is demonstrate by providing substantial examples rather than through completeness.

In each section of this chapter, Egyptian words will be ordered according to the Egyptological “alphabet,” already set out near the beginning of Chapter 9: ʒ, i, ‘, w, b, p, f, m, n, r, h, ḥ, ḥ, s, š, q, k g, t, ṭ, d, ḏ. This ordering will also be used in the next three chapters.

NATURE AND AGRICULTURE

The etymologies claimed in this section are subdivided into seven categories: marshes, reeds and pastures; trees and fruit; cultivation; cereals; animal livestock; birds; and, finally, agricultural implements and containers.

Marshes, reeds and pastures

Given the size and the wealth of the Nile Delta and the relative lack of wetlands in Greece it is not surprising that so many Greek terms for water plants should derive from Egyptian. Greek derivations from the Egyptian root ʒh “new growth” when the /3/ was pronounced as a liquid, will be discussed further on in this chapter under *λάχεια* and *λάχνη*. At this point I am concerned with later forms. ʒhr, only attested in Demotic and the Coptic *ahre* “marsh, reeds,” is generally accepted as being the source of the Hebrew *>ahu* < *aḥu “reeds, rushes.” It is found in the Greek ἄχυρα (H) “straw, chaff, bran,” and ἄχωρ (4) is “skin disease, scurf.” With the shift /r/>/n/ ἄχνη (H) “bran, powder foam,” and ἀχαινής (4) “young deer with velvet on his antlers” belong to the same cluster.” Αῖχάλιον is a plant name associated with “marsh mallow, medicinal herb.” Neither Frisk nor Chantraine provides an etymology for any of these.

ʒqt “vegetable” appears in the Greek ἄρακος (4) “wild chickling” a legume. Chantraine describes the etymology as unknown, although he considers the possibility that it comes from Asia Minor.

The Egyptian **idb** “land along a river bank,” provides a strong etymology for ἔδαφος (H) “bottom, base, land, soil.” Chantraine views the structure of the word as “singular” and tentatively associates it with *hédos* “seat.” He is unable to explain what he sees as the suffix, *-aphos*.

The Greek ἄρον (4) is a plant name applied to many species. Pliny referred to an Egyptian *arum* and on this ground Hemmerdinger accepted an etymology from the Late Egyptian **rw** “reed.”³ Pierce denied this on the grounds that *áron* was nothing like a reed. In so doing, he disregarded the vagueness of the term and the number of species it referred to.⁴

The etymological link between the English “green” and “growing,” shows that in many languages “green” is as much a process as a nominal modifier or adjective. This is certainly the case in Ancient Egyptian. In

Chapter 9, I demonstrated the relationship between Aphrodite and *Pr w3dyt*.⁵ The root **w3d**, written with a lotus and a snake, **𐩣𐩢𐩺** (M14) means “green, make green, flourish.” The Greek **ἄρδω** (5) is “to water the ground,” by a river or artificially. Chantraine proposes an initial *F* - but suggests no etymology.

The fourth lemma in Chantraine’s treatment of **ἰός** (4), adjectival **ἰώδης**, is “verdigris, the greening of bronze, rust.” Chantraine links it to *íos* “poison.” He finds an Indo-European root attested in the Latin *virus*. However, *íos* *ioódēs* “make green” is semantically closer to the Egyptian **w3d**.

Despite phonetic difficulties beyond those I have normally tolerated, **wh3t**, Demotic *whi*, Coptic *uahe* “cauldron, oasis” is universally admitted to be the etymon of the Greek **ὄασις** (5) “oasis.”

The very probable, but unattested, form ***p3š3** “marsh, field, meadow” provides a good etymology for **πίσσα** (H) “water meadow.” Frisk describes this word as “without a sure etymology” and Chantraine calls it “obscure.” The form ***p3s3** would also explain the place name **Πίσσα** that is applied to two marshy regions and their cities in Elis in the northwest Peloponnese and in Tuscany.

Mnh “reed, papyrus” provides a plausible origin for the Greek **μνάσιον**, a Nile plant. Chantraine gives no etymology.

In Chapter 10, **mr** “canal” was mentioned in connection with *mr* “libation trough” and the mythical spring Mélia.⁶ The phonetic biliteral **𐩢𐩺** (U6) *mr* “hoe” appears as a symbolic tool cutting a canal on the famous mace head of the Scorpion Pharaoh at the beginning of a united Egypt. *Mr* belongs to an Afroasiatic root ***mar** “hoe” also found in Semitic, East Chadic and Highland East Cushitic, linked to another root ***mar** “dig.”⁷ “Canal” provides a good origin for **ἀμάρα** “canal.” Frisk and Chantraine suggest two etymologies for this. The first is to connect it to a verb **εξ-ἀμάω** (H) “to open a channel” and possibly to **ἄμη** “shovel, water bucket.” Besides associating it with *amára*, neither Frisk nor Chantraine has an etymology for *ámē*. On a semantic level a derivation from *mr* would explain the apparently incongruous set of meanings for *ámē*. Before the development of the shadouf, or pole and bucket lever, in the New Kingdom, Egyptian irrigation and the raising of water depended on manual buckets.⁸ A man holding a basket or bucket can be seen on the well-known Scorpion mace head.

The likelihood of the *mr* “channel, pond,” having had a prothetic

aleph is increased first by such a sound found in what appears to be a Chadic cognate but, more powerfully, by the Coptic forms *eme* (S) and *ame*, *ámē* (B).⁹ Not surprisingly, as in so many cases, the Bohairic, or northern, Coptic form is closer to the Greek. The Coptologist Eugene Dévaud saw the Coptic *ame* as derived from *mr*.¹⁰ Both Černý and Vycichl, however, derive it from the Greek *ámē* without considering that word's lack of an etymology.

At this point we should turn to Frisk and Chantraine's second etymology for *amára*. They associate it with the Hittite *amiyar* "canal" and to see it as a term for an "oriental technique." This explanation is extremely plausible, but the general topography of central Anatolia made irrigation there less prominent than it was in either Egypt or Mesopotamia. The Hittite and Greek terms could derive from the Akkadian *marru* "hoe" with an extended meaning "channel, canal." More likely, they came from Egyptian forms *amar "canal" and the tools needed to construct it.

On the principle of substitution of Greek /ph/ for Egyptian /m/ discussed in Chapter 8, another possible loan from Egyptian *mr* in the sense of "artificial lake" is φρέαρ "well, cistern." Frisk and Chantraine link *phréar* to a reconstructed Indo-European root *bhre-ew- found in the Germanic *brunn "spring, bourne" the Scottish *burn*. They both point out, however, that *phréar* is unique in referring to still, as opposed to running, water.

The suggested etymologies of λειμὼν "meadow" and λιμνὴ "lake" from *r-īmn "pasture, marsh" have been discussed above.¹¹

The Middle Egyptian **rd**, **rwd/d** Coptic *rôt* (SBA) or *rot* or *lôt* (F) meant "hard, strong, plant, grow, flourish, prosper, shoot of a tree, health in bones and limbs." All of these are written with the phonetic **rwd** or **rwd** ⲩ (T 12) "bow string, cord." In Greek there is a cluster ῥαδινός (H) ῥοδανός or ῥοδαλός "supple, slender, lively." This is used to refer to "straps, vegetation and then the human body." ῥοδάνη is "the thread used in weaving." Chantraine has no problem with the suffixes -inos and -anos, but he is puzzled by alternation of vowels in the stem. (This seems to me to be a good indication of a loan.) He, even more strongly than Frisk, finds all previous attempts at constructing an etymology unsatisfactory.

The Greek ῥάδαμνος (3) and ὀρόδαμνος (4) "branch twig, sprout" could also derive from **rd**, **rwd/d**. On the other hand, it could come from **Rdmt** "a plant, cypress grass." Chantraine sees a possible relationship

with the Latin *radix* “root.” He and Frisk admit, however, that these terms are considerably confused.

In Chapter 14 I referred to the Semitic etymology for the Greek **λωτός** proposed by Muss-Arnolt and Lewy and accepted by Boissacq and Pauly Wissowa.¹² Constantin Daniel has powerfully challenged this view; he argues that the Greek word comes from the Coptic *rōt* or *lōt*.¹³ He quotes Herodotos, who wrote “they gather water lillies [*krínea* see above] which they call *lōtós*.”¹⁴ Alan Lloyd, who accepts a Semitic origin for *lōtós*, states that in this case, among many others, Herodotos had fallen into the “type of error . . . common in Gk writers.” Lloyd does not mention the Egyptian or Coptic words.¹⁵ Daniel’s second witness comes from six centuries later; Athenaios, who lived in Naucratis on the Nile in the third century CE, wrote in his “Banquet of the Sophists”: “The Egyptians call it lotus.”¹⁶ While the Coptic *rōt* or *lōt* merely meant “plant,” the word is specifically associated with lotus in the determinative used for *rd* 𓂏 (M32) which Gardiner describes as “stylized rhizome of a lotus.” Therefore, in this case, as in many others, I do not believe that modern *Besserwisserei*, should so easily be used to dismiss the testimony of ancient writers.

To conclude, as I wrote in the last chapter, I believe that the Greek *lōtós* derives from a conflation of the Egyptian and West Semitic sources.

Χώρα: The plausible derivation of *khōra* “space, country as opposed to town,” from the Egyptian 𓂏 originally *ḥr was discussed in Chapter 8.¹⁷

Gardiner described the sign 𓂏 (M12) **ḥ3** as “leaf, stalk and rhizome of lotus.” The plural **ḥ3w** meant “plants, flowers or lotus flowers.” This provides a plausible etymology for **χλόη** (5) “new green plants.” Perpillou proposes an Indo-European root *ghel. He admits, however, that no other example has a zero grade.

Some apparent cognates of *khlōē* notably **χλωρός** (H) “the green or clear yellow of plants,” have a second liquid. These may be explained by confusion with another Egyptian word **ḥrrt** “flower” Demotic *ḥrry*.¹⁸ This word has many Afroasiatic cognates, including Berber *alili*, Cushitic *ilili* “flowers.” There is also a Hittite word *alil*. The Afroasiatic terms with Coptic *hlēli* (F), *hṛēre* can also explain the origin of **λείριον** (4) and the Latin *lilium* “lily, narcissus.” W. H. Worrell and B. Hemmerdinger see the Coptic etymology for the Latin and Greek terms respectively.¹⁹ Richard Holton Pierce denies this on the grounds that a form ἀληλώ cited by Hemmerdinger “is not an uncontestable transcription of *ḥrrt* and bears no clear relationship to *λείριον*.” He continues: “Moreover

hrrt was throughout its history a general term for flower, rather than a specific designation for any particular plant.”²⁰ This statement is comparable to denying a relationship between the general German *Tier* “animal” and the particular English “deer”! Frisk and Chantraine cautiously see *leirion* as coming from the eastern Mediterranean. Emilia Masson concedes that it may be Semitic.²¹

Ἡ3w nw sšn “lotus flower” may also be the origin of **κρίνον** (5) “lily.” The late term **καλαμό-κρινον** “reed resembling a lily” suggests the possibility of a lotus. Frisk and Chantraine provide no etymology and suppose that *krínon* is a loan.

Ἡ/Ἡ3t “marsh” clearly belongs to the same cluster. This provides a good etymon for **χῑλός** “fodder, pasture.” Neither Frisk nor Perpillou suggests an etymology for this word. Phonetically, this etymology is very close to my proposal that **χῑλιοι** “thousand” derived from the Egyptian **Ἡ3** “thousand.”²²

Ἡ/Ἡ3t “marsh” may well provide one etymology for **χόρτος** (H). In Homer it meant “courtyard, the perimeter of the horizon, meadow.” In this sense it appears to belong to an Indo-European root found in the Latin *hortus*, the Teutonic *gards* etc. In Hesiod and later writers, however, it is used to signify “meadow, space with plants” and above all “fodder, hay, grass.” Thus the Indo-European and Egyptian roots appear together to have given the word its wide range of meanings.

Sm(w) Coptic *sim* “plants” was often written with **𐩱𐩢𐩨** (M2o) “reeds growing side by side.” One spelling of **smyt** also “plants,” Coptic *sme*, is with the determinative **𐩱** (M2) “plants, frequently reeds.” Another **smyt** without that determinative meant “edge, mat.”²³ Both Frisk and Chantraine are happy to discuss the common suffix *-ak* in **σάμαξ** (5) “reeds, mat of reeds.” They are, however, unable to explain the root.

In the 1880s Wiedemann proposed the derivation of the Greek **σάρι** (4) “Egyptian water plant” from the Late Egyptian **s’r** “thicket, papyrus-like-plant.”²⁴ It is now generally accepted that *s’r* was a loan from the Semitic **š’r** “barley field, scrub country or thicket.”²⁵ Theophrastos’ specific mention of Egypt suggests that the name was taken from there rather than from the Levant.²⁶ The uncertainty of the Semitic sibilant *šin* may explain the Boharic *sari*, which Walter Crum, the lexicographer of Coptic, relates to the Greek *sári*. Chantraine subsumes *sári* under **σίσαρον** “parsnip?” but accepts no etymology for either.

One indication of the ideological constraints on lexicographers can be seen from the differential attitudes towards two meanings of the same

Egyptian root **sšn** “lotus” and **sšnw** “ropes, cordage.” Generally, **σοῦσον** “lily” is accepted as an “oriental” loan, passing from Egyptian to Canaanite and on to Greek. On the other hand, Chantraine describes **σοῦσον** “ships’ cordage” as “without an etymology.”²⁷

The hieroglyphic biliteral sign šn  (V7) is “a loop of cord that hangs downwards.” As mentioned in Chapter 13, it occurs in the word **šnw** “net, enclosure, circuit, circumference.” This word, in turn, provides a plausible etymology for the Greek **σχοῖνος** *kono* “reed, cord, measure of land.”²⁸ Chantraine simply states: “A plant name without etymology.” A later borrowing of **šnw** together with **šnʿ** “breast” provides an origin for the Latin verb *sinuo* or noun *sinus* a “a concave fold in cloth, breast.” Ernout and Meillet sum these up as “without etymology.”

A common Late Egyptian word for “reed” is *qmʒ*, Demotic *qm*, *qmʒ* and Coptic *kam*, a metathesis *qʒm* has been attested.²⁹ The latter provides a plausible etymon for the Greek **κάλαμος** (6) “reed, straw” (and later “pen”).³⁰ Chantraine sets out an Indo-European root in the Latin *culmus*, the Old High German *halam* etc. “straw.” He points out, however, that the Greek vocalization *kala-* is “isolated.” It is difficult to decide which is the more likely but, given the closer semantics—reeds not straw—and the vocalization with /a/, the Egyptian etymology appears preferable.

Daniel argues plausibly that the Egyptian *qm*, Coptic *kam*, provides a clear etymology for **κάμαξ** (H) “prop, pole, stem.” He argues that as this is attested in Homer it is older than the accepted Semitic etymology of *kánna* “reed” mentioned in Chapter 7.³¹ Daniel points out an Egyptian parallel in *kamax*.

Herakles’ third labor was to behead the many-headed Hydra from which, whenever it was beheaded, many others sprang up. A number of the other labors involved marshes or hydraulic engineering.³² This fact gives some credence to the euhemarist interpretation of Servius, the commentator on Virgil, who claimed that the Hydra (water) represented a delta where whenever a channel was blocked a new one or new ones broke through.³³ The pattern revealed in the myth and its interpretation explains a group of apparently wildly incongruous words: **Dn** is “to chop off, behead.” **Dni** is a cluster of words associated with irrigation. The basic meaning is signified by the determinative  (V11) “to block or dam water.” This involves channeling; *dnit*, *tēne* in Coptic, is a “dike, ditch, canal.” With appropriately different determinatives *dnit* is “bowl, basket” used to raise water to higher levels before the introduction of the

shadouf in the Eighteenth Dynasty.³⁴ *Dni* without the damming determinative is to “allot, share out,” presumably this allotment was initially of water.³⁵ In this sense it is cognate, either genetically or through loaning from Egyptian, to the Semitic root $\sqrt{d}n$ “judge, adjudicate.”

Dnyt is a “land register” and this, or **Dnit/tēne**, provides a good etymology for **δήνεα** (H) “plans, designs.” Chantraine dismisses both of the previous etymologies for this word.

Yet another word in the Egyptian cluster is **dnit** “festival.” This presumably is connected to distribution. **θοίνη** (H) is a “festival following a sacrifice.” Despite Chantraine’s reconstruction of an original ***θωι-vā** this too appears to be derived from *dnit*. There is no Indo-European competitor.

Bushes, trees and fruit

Fewer Egyptian names for trees and their fruit than for marsh plants found their way into Greek. Nevertheless, the number is still impressive. In this case, too, the vocabulary generally applies to fruit cultivated earlier and more extensively in Egypt than in Greece, such as dates and figs. Interestingly, however, a number of these terms have extremely wide-spread extended meanings.

Chantraine, Ernout and Meillet all recognize the similarity between the Greek **ἱξός** “mistletoe or glue used to lime birds” and the Latin *viscum* “mistletoe or glue.” They are, however, unable to see how the connection can be made. The simplest explanation is that they are both borrowings from a third language. The explanation can be plausibly seen in the Egyptian **iš** “saliva.”

The Egyptian **b3q** “moringa or tamarisk tree” and its oil appears to be the origin of the Greek **μυρίκη** (H) “tamarisk tree.” Chantraine sensibly rejects Lewy’s etymology from the Semitic $\sqrt{mrr}$ or “myrrh” but provides no alternative.

The Late Egyptian **b’i**, the Coptic *baei* (S) *bai* (B), is “a palm branch stripped of its leaves.” Chantraine derives **βαῖς** (3) “palm leaf” from this word.

Bny/Bnrt “dates, fruit, sweet.” Egyptologists and linguists have long puzzled over a confusing tangle of words beginning with *bn*. Apart from (1) *bni/bny* “date,” there are (2) *bwn* “double spear point,” (3) *bnbn* “point aloft, become erect,” “pyramidion [the point on top of pyramid],”

- (4) *bnt* Coptic *boine* “harp,” (5) *bnt* “fruit or compote,” (6) *bnw* “phoenix,” (7) *bnwt* “secretion, wound or blood.”

No one doubts that *bnt*, *boine* “harp” is the etymon of the Greek **φοῖνιξ** (4) “a type of lute.” The Coptic forms are *boine* (s) and *ouoine* (B). Unless influenced by Greek, these indicate an earlier *b^wa/ənət.

To turn now to *bni*/*bny*/*bnrt*, the consonantal structure of this word is debated. The lexicographer Raymond Faulkner assumed that the earliest form was *bnrt*, which later developed into *bnit* and *bny* “date, fruit.” Semitic words for dates based on *bnr* seem to support this idea. The majority of more recent scholars, however, see *bnrt* as a hypocorrection of *bni*.³⁶ Orel and Stolbova do not provide an Afroasiatic root for this and Takács argues that the Proto-Berber form *b-y-n “date” is not a genetic cognate but a loan from Egyptian.³⁷ Many of the Berber words contain a /y/; only the cognate Guanche term for “figs,” *te-haune-nen*, has an internal /w/. Thus, from the Afroasiatic end evidence for a rounded /b^w/ is difficult to find. On the other hand, it would fit the form and reconstruction *boine which is found in the Greek **φοῖνιξ** (3) “date tree.”

At this point we should note that the color of fresh dates is crimson. Thus *boine “date,” would fit with what lexicographers see as the primary meaning of *phoînix*, *ponikia* in Linear B: “red, purple.”³⁸ Taillardat, continuing Chantraine’s dictionary, sees this *phoînix* as a suffix -ix on a root found in **φοινός** (H) “blood red.” *Phoinós* itself he derives from a Indo-European root *bhen “beat to death,” although, rather puzzlingly, he emphatically denies that this word has any connection with **φόνος** (H). In any event, meaning 7 “secretion, wound, blood” is a more direct Egyptian candidate.”³⁹

Herodotos explicitly states that “the [Egyptian] name of the sacred bird is **φοῖνιξ** (5) “Phoenix” clearly deriving it from the Egyptian name Bnw.⁴⁰ It is possible that *phoînix*, in this sense, appears in the Linear B form *ponike*. The early twentieth-century Egyptologists Sethe and Spiegelberg and many later scholars, using an unusual Late Egyptian spelling *bynʕ* and the analogy with *boine* “harp,” plausibly reconstructed the sacred bird too as *boine.⁴¹ Naturally so obvious a conclusion had to be challenged by skeptics.⁴² To some extent, the image of the phoenix rising from the ashes can be associated with the flamingos rising from the salt lakes of east Africa and as their medieval Latin name—derived from “flame”—suggests, they are pinkish and scarlet in color.

None of the derivations of *bn* can directly explain **φοῖνιξ** (2)

“Phoenician.” The only possible connection is the cumbersome one through the tentative connection *bny* “date” with crimson to the “purple dye” for which the Phoenicians were famous. There are two other clues concerning the ethnic name. The first is the Egyptian Fnhw the name of a Syrian people that looks remarkably like *phoinik-*. Nevertheless, even if they can be identified, the likelihood is that the Egyptian name was taken from the people themselves or their, probably, Semitic-speaking, neighbors. The local name, however, was Knʿn, Kənaʿan in Hebrew rendered in the Akkadian of the *Amarna Texts* as Kinahhi or Kinahna/i. Kinahhu also meant “purple.” Astour argues that this word came from the land of Kinahhi.⁴³ Thus the common assumption that *phoinix* “red, purple,” and Phoinix “Phoenician” are linked could come from a Semitic calque. On the other hand, the conventional belief that in the Greek case the name of the people *phoinix* came from that of the color *phoinix* would fit if the latter derived from *phoinix* “date.”⁴⁴ This seems more likely than the final possibility: that Kinahna was originally *Kʷinahna and taken as such, like the name Gʷebila, into Greek before the breakdown of labiovelars. Thus becoming *pənahhi and the Mycenaean *ponikia*. The need for two hypothetical forms makes this explanation far too cumbersome.

To return to the base of this section: Given the analogies from *boine* “harp” and boine “phoenix,” there is little doubt that *bni* is the origin of *phoinix* “date.”

M3m3 “Doum palm used for nuts and fiber” is almost certainly the etymon of **μέρμῆς** (H) “cord, rope.” Interestingly, Chantraine sees it as a “broken reduplication” but concludes that the etymology is “obscure.”

On semantic grounds **nqʿwt** “notched sycamore figs” provides an excellent correspondence with the Cretan **νικύλεον** (2) “type of fig” about which Chantraine writes “possibly Aegean.” The match is sufficiently strong to overcome the phonetic difficulty of the final -l.

James Hoch sees the reconstructed Egyptian form *alhammān as a borrowing from the Semitic $\sqrt{\text{rmn}}$ “fruit,” or more specifically “pomegranate.” He sees the Akkadian *armannu* as the most likely source of the Egyptian form.⁴⁵ With the article p3, *p3ʿnrmm, or Coptic *p(h)erman, provides a good etymon for **προύμνη** (4) “plum tree.” Chantraine sees it as a loan probably from Asia Minor.

The obvious etymology **šn bnrt**, Coptic *senbeni* / *sbbeni* “hair of the date palm” **σεβένιον** *sebénion* (2) “date palm fiber” was seen by Jablonsky

in the early nineteenth century and Wiedmann in the 1880s.⁴⁶ Frisk does not list *sebénion* and Chantraine does not refer to its etymology.

Ἡ3nnt “type of date palm” and the Late Egyptian *h3nn* “kernels” provide a good etymology for the Greek **κάρυον** (5) “nut” Neither Frisk nor Chantraine can find an etymology for this word. The latter is not impressed by Pokorny’s attempt to derive it from *qar “hard.”

In the case of **Σέσελι** or **σίλι** “type of Egyptian tree,” Chantraine agrees that the plant is Egyptian and that the word is “foreign.” He does not put the two together, however. Despite the semantic distance *srd* and *ssrd* “to plant trees” would seem to match well.

Σταφυλή (H) “bunch of grapes” appears to derive from a salesman’s pitch, “choice, select, excellent” originally from the Egyptian *stp* “choose, choice, select, choicest, excellent.” This verb is a causative s—make—with *tp* “head” or “best.”⁴⁷ The phonetic problem with a loan into Greek is that the Coptic forms are *sōtp* (S) and *soṭp* (B) in which a vowel comes between the first and second consonants. The final *-ylē* is also unexplained. Nevertheless, the idea that a form *stVp existed is strengthened by the number of Greek words with such a structure and semantically linked by the sense “choice, best.” All these words lack Indo-European etymologies.

Staphylē itself does not merely mean bunch of grapes. Homer uses the word to signify “level, standard,” which increases the plausibility of the etymology proposed above.⁴⁸ Furthermore, Chantraine admits that it is “easiest,” to see *staphylē* as a loan. He sees **Ἀσταφίς** (**ὄσταφίς**) and variant of **ῥσταφίς** “raisin” as related to *staphylē*. The variants themselves indicate borrowings. **Στέφο** (H) is “garland, honor, crown” with the extension **στέφανος** and the related **στέμμα** (H)(sacred) “garland.” Chantraine sees the semantic connection among these words as being “circuit,” but he has no explanation for it. It is reasonable to consider this sense as secondary.

Finally, there are **στίφος** (6) “a group of [picked?] men, often military, pressed together” and **στιφρός** (5) “strong and sturdy.” Chantraine related this to a Balto-Slav root *stieb* “mast, pillar, stick.” Given the otherwise unexplained cluster it seems more plausible to prefer an Afroasiatic etymology.

Qwqw “dorm palm nut” has two Greek derivatives. The first **κοῦκι** (1CE) “dorm palm nut” is accepted by all specialist authorities and even Frisk and Chantraine admit that it is a possible loan from Egyptian.⁴⁹ The second likely derivative is **κόκκος** (5) “kernel, grain, seed of pome-

granate.” Frisk suggests it is a “Mediterranean loan”; Chantraine says it is unknown.

The words **k3m(w)** “vineyard, grape harvest, vintner” and **k3ny** “vintner” have been discussed at length in Chapter 8.⁵⁰ For the Egyptian cultivation of grapes and wine, see the short survey by Jean Hani.⁵¹

Herodotos states explicitly that the Egyptian name for castor oil was **kiki**.⁵² Despite certain complications as to precisely which vegetable oil is meant, the identification of this oil with the Egyptian **k3k3** has been universally accepted.⁵³ None of these scholars have linked this word to **κηκίς** “oozing liquid” and the verb **κηκίω** “ooze” (H). This form is used to refer to resin, blood, fat of sacrifices etc. It would seem appropriate, however, to derive these from viscous, fatty castor oil. Neither Frisk nor Chantraine have found a satisfactory etymology for this.

The Egyptian **d3bw** “figs, foliage” and Late Egyptian **db3w** “leaves” together provide a plausible etymology for **θρίον** (4) “fig leaf.” The weakness of medial or final -b has been discussed in Chapter 9.⁵⁴ Chantraine is suspicious of Pokorny’s Indo-European etymology for *thrion*. Frisk sees it as “Mediterranean.” In Chapter 10, I proposed a derivation of *terébinthos* from *d3b ntr “sacred fig.”⁵⁵ With metathesis of liquids, **db3w** “leaves” also provides an etymology for **τύβαρις** “a Dorian salad.” The only problem here is that because of the consonantal /3/ this loan necessitates an early borrowing, while nearly all Dorian borrowings from Egyptian appear to have been made in the First Millennium.

The Egyptian **dqrw** is “fruit.” Orel and Stolbova find no Afroasiatic root for this. Either as a cognate or as a loan, however, it is clearly related to the Semitic $\sqrt{\text{dql}}$. David Cohen saw this as meaning “date of inferior quality,” linking it to Ethiopic forms indicating inferiority. Most scholars, however, interpret the Arabic *daqal* as “dates of superior quality.”⁵⁶ In any event, no one questions the association with dates. In the nineteenth century, Lagarde and Lewy proposed a reconstructed form *daq1 on the basis of the Aramic *dqlā* and the post-biblical segholate form *deqel*. They saw *daq1 as the etymon for a special meaning of the Greek **δάκτυλος** (4) “type of dates.”⁵⁷ Muss-Arnolt contested this interpretation but offered no alternative.⁵⁸ Frisk and Chantraine were sympathetic to the Semitic etymology, although they believed that the form had been influenced by *dáktylos* in its usual sense of “finger.” Frisk suggested that “the folk etymology was built around the resemblance between the leaves of the date palm and the outspread fingers.” I see the resemblance as much closer to the strings of dates themselves. Neither Frisk nor Chantraine

provides an etymology for *dáktylos* “finger.” They are not convinced by Pokorny’s attempt to link it to the Gothic *tekan* “touch” or the Old Icelandic *taka* “take.”⁵⁹ In this situation it seems legitimate to ask whether *dáktyloi* “dates,” for which there is a plausible etymology, could be the origin of *dáktyloi* “fingers,” which lacks one. The possibility of a link between clusters of fruit and clusters of fingers can be seen in the English “hand” of bananas. Furthermore, apparently absurd “slang” etymologies do occur. For instance, there is no more plausible origin for *σαρκοφάγος* than “eater of flesh.” In Late Latin *testa* “tile” replaced *caput* “head,” and *equus* “horse” was superseded by the slang *caballus*. This, as Saul Levin has shown, was derived from the Canaanite *gāmāl* “camel.”⁶⁰ Ernout and Meillet see the Latin *camēlus* as coming from the Greek *κάμηλος*. Even so, they cite the Roman grammarian Varro as having written that the word came from Syria to Latium.⁶¹ The /a/ in *caballus* makes a derivation from *kāmēlos* less likely than one directly from a Canaanite dialect, probably Punic. All in all, *daqł- *dáktyloi* “dates” could well be the origin of *dáktyloi* “fingers.”

Chantraine devotes a third section to *Dáktyloi*. These are sometimes giant and sometimes dwarfish figures famous for their power and smithcraft. Chantraine maintains that these *Dáktyloi* have nothing to do with the meanings of the word. However, it is striking that they are associated with **Ἰδα**, a name shared by two dominant mountains, one in Crete and the other in the Troad. Both Frisk and Chantraine view it as a “Pre-Hellenic word without etymology.” There is, as Astour has demonstrated, a plausible etymon in the Semitic $\sqrt{\text{yd}}$ *idu* in Akkadian, *yād* in Hebrew and *yadā* in Aramaic. The basic meaning is “hand,” but in Canaanite it can also mean “monument, phallus, power,” all possible etyma for the name of a mountain. Given the many Semitic place-names in Crete, $\sqrt{\text{yd}}$ provides a plausible origin for *Ida*.⁶² Naturally, a derivation from “hand” is strengthened by the presence of dependent *Dáktyloi* “fingers” around the two *Idas*.

Cultivation

Although Greek agriculture, dating back to 6000 BCE, is probably as old as that in the Nile Valley, the number of plausible Egyptian etymologies for Greek words concerning arable crops and cultivated land is not surprising. Many of the examples given here in fact linked to the wild and

domesticated fertility of the Nile Delta. The reasons for the number of probable loans in this semantic area seem to be, first, at least since the Late Bronze Age, Egypt was seen as the “breadbasket” of the eastern Mediterranean. Second, many of the terms in this section have religious significance and can, therefore, belong within the context of the cultural role of Egyptian religion in the formation of Greece.

The Egyptian root $\sqrt{3h}$ has many meanings, nearly all of them positive. With different spellings $3ht$ can mean “inundation season, papyrus, thicket, arable land.”⁶³ This double meaning fits $\lambda\acute{\alpha}\chi\epsilon\iota\alpha$, the mysterious epithet for an uninhabited and wooded, yet well-watered and potentially rich island found in the *Odyssey*.⁶⁴ In addition, $3h$ provides a reasonable etymology for the, otherwise unexplained, Greek verbal cluster around $\lambda\alpha\chi\alpha\acute{\iota}\nu\omega$ (H) “cultivate vegetables.” Chapter 21 contains a general discussion of the ramifications in Greek of the related Egyptian roots $w3g$ and $w3d$ “growth, swelling, festival.” At this point, I should just like to consider one instance, the word $\delta\acute{\rho}\gamma\acute{\alpha}\varsigma$ (5) “well-watered land, often sacred.” The *orgás* was a stretch of land near the sacred oracular center of Eleusis with its close Egyptian connections.⁶⁵ The *orgás* was otherwise known as the Rharian Plain, famous for its fertility and supposed to be the first place cultivated by Demeter.⁶⁶ It was also supposed to alternate between sterility and fertility with the subterranean imprisonment of Persephone.⁶⁷ Rharian has a clearly Egyptian origin from a reduplication of $3h$, $3h3h$ “to grow green.”

Also $3h 3h$ provides a reasonable etymology for $\lambda\acute{\alpha}\chi\eta\eta$ (H) “new growth.” Generally interpreted as “hair, fleece,” this word is also used to describe “new foliage.” Chantraine supports Benveniste’s construction of a hypothetical root $*w\check{l}ik-sn-\bar{a}$ to link *lákhnē* to Slav and Iranian words for “fur” or “hair”—*varṣa* and *vlasú*. Pokorny constructs a root $*\check{u}el$ “wool, hair” with two derivative branches: one with a final guttural to which *lákhnē* belongs; the other with a final dental to which the Germanic *wald* belongs. According to Pokorny, $\lambda\acute{\alpha}\sigma\iota\omicron\varsigma$ (H) “hairy, furry leafy” fits in this class.⁶⁸ As there is no trace of an original F “w” in any of the Greek words with the stems *lakh-* or *las-*, it would be simpler to postulate two borrowings from Ancient Egyptian. The first would have taken place when the sign was a uvular /ħ/ and the second when it had merged with /š/. The problem with this scheme is that /3/ is generally assumed to have lost its consonantal force some centuries before the merger of /ħ/ and /š/. If this is correct, the semantic similarities between the two

clusters must be the result of coincidence and the *lās*-group is unlikely to derive from Egyptian. Therefore, this group remains unexplained. In any event, *ʒh* remains the least bad etymology for *lakh*.

In 1953 Petr Viktorovitch Jernstedt proposed deriving the Greek **ἐρυστίβη** “verdegris, rust in plants” from the Coptic **ersēbe** “rust in plants.”⁶⁹ Neither Černý nor Vycichl mention this proposal in their dictionaries. Chantraine associated it with the Indo-European root **rudh-* “red,” although he is puzzled by the rare suffix *-be*.⁷⁰

The Egyptian **ṛnpwt** “herbs, vegetables,” *ṛpy* in Demotic and *(e)rpō* in Coptic, provides a convincing etymology for **ῥάφανος** (3) (**ῥάφους**, **ῥάπυς**). This was an Attic word for “cabbage, radish.” Frisk and Chantraine argue that similar forms in other Indo-European languages are probably loans from Greek. Thus, *rháphanos* does not derive from an Indo-European root.

Šspt, also *sšpt*, in Late Egyptian “cucumber,” provides a plausible origin for the Greek **σισύμβριον** (4) “watercress” for which Chantraine gives no etymology.

Qʒbt, was “breast (male or female)” in Middle Egyptian. In Late Egyptian *qbyṯ* signified “breast” or more precisely “nipple.” The Greek **κύαμος** (H) “bean,” **κύαμος Αἰγύπτιος**, was a “pink water lily.” According to Plutarch, it was also “the extremity of the breast which swelled at puberty.”⁷¹ The resemblance between beans and nipples may well have been one reason for the Pythagorean abstinence from beans. Aristotle, in fact, explained the taboo: “because they are like the genitals.”⁷² Chantraine tends to accept the conventional view that *kúamos* is a loan, although he also considers Frisk’s view that it derives from **κυέω** “to become pregnant, swell.” This view conflates the Indo-European and Egyptian sources.

Proto-Afroasiatic apparently had a root **qʷad* found in South Cushitic and Chadic and meaning “calabash.”⁷³ From this developed Chadic and Egyptian words for “pot,” **qd** in the latter. In Egyptian the root developed in two different directions. On the one hand, “to pot” (*kōt* in Coptic) was extended to “to form, build, create” and from that to “creation, nature.” On the other hand, making a pot by coiling, walking round it and, later, throwing on a wheel was *qd* and *qdi* :: *kto*, *kato*, *kōt e* (S) and *kōt i* (B) and came to mean “go round, encircle, circumference.” This latter sense is reflected in loans into Greek. **Κώδων** (5) “embouchure of trumpet,” and the trumpet “used to signal rounds of inspection.” Chantraine relates this to **κώδυσια** (4) “fruit of Nile, water lily” and “Egyp-

tian bean” and to **κώδεια** (H) “garlic, onion or poppy bulb.” Apart from relating them, he provides no etymology for the cluster. The image of garlic as wheel also occurs in other Greek terms for “garlic”: **ἄγλις** (4) and **γέλιγλις** (4). Frisk and Chantraine fail to find an etymology for these too. It would seem to come from *gilgāl*, *galgal*, West Semitic words for “wheel, circle, ball.”

Cereals

Given the importance of Egyptian grains to the Aegean, it is not surprising to find many Greek words in this semantic sphere with plausible Egyptian etymologies.

The derivation of **ᾰθήρ** “pointed ear of wheat” **ᾰθήρη** “soup made from wheat flour” from *ntr* and the absence of an Indo-European etymology were discussed in Chapter 10.⁷⁴ **ᾰθήρη** will also be mentioned later in this chapter.

Plausibly **im3** “gentle and kind” can be seen as the origin of the Greek **ᾰμαλός** (H) “tender, feeble.” Also, *im3* as “well disposed, gracious [of goddess]” and *im3yt*, an epiclesis of Hathor, provide an etymology for the Greek **ᾰμαλιά** “abundance of grain,” an epithet of Demeter. Neither Frisk nor Chantraine offer an explanation for this epithet. **ᾰμαρία** and **ᾰμάριος**, epicleses for Athena and Zeus in Achaea, have varied forms, such as **ᾰμαρίον**, which suggests a loan. Chantraine, however, follows the scholars who arbitrarily link **ᾰμαρία** and **ᾰμάριος** to **ᾰμαρτης** (H) and **ᾰμαρτέω** “to attend, bring together.” They construct this from **ᾰμα** + **ᾰραρίσκω**, which is alleged to be the source of **ᾰρθμός** “link, union, friendship.” This implausible chain seems less likely than deriving **ᾰμαρτης**, and **ᾰμαρτέω** from the Egyptian *sm3* “unite,” *sm3t* “union” and *sm3yt* “association, confederacy.” This would have happened when /3/ still had consonantal value and before the Greek shift initial s>h.⁷⁵

In a note in Volume 1, I considered the possibility that the Greek term **ᾰτεόκριθος** “really barley” was part loan and part calque from the Egyptian phrase **it m it** “really barley.”⁷⁶ The etymologies of the Greek **κριθή** “barley” **χίδρον** “fresh grain” and **κάχρυς** “grilled barley” from the Egyptian *šrt* “kind of grain” and *šrit* “barley” were referred to in Chapter 8.⁷⁷

The Egyptian **w3y** has two distinct but related meanings written with different determinatives: “harvest” and “to rob, pillage.” A number

of derivatives exist in Greek. Chantraine's third entry for **οὔλος** (H) is "destroyer," an epithet for Ares. Without understanding how, he sees this as related to **ῥαλλῶμι** (H) "to lose, destroy, perish." He sees this as based on a radical *ol but admits no plausible relationship can be found outside Greek. Despite the difficulty with the double /l/, the two are very plausibly explained as separate borrowings from **ʿwʒy**. The connection is made still tighter by Chantraine's fourth entry for **οὔλος**: both "sheaf" and a song in honor of Demeter, goddess of the harvest. Chantraine relates this to **ἰουλόξ** (H) "first down, catkins, sheaf of corn" and **ἰουλώ** or **Οὐλώ** goddess of the sheaves or Demeter. The double parallel of destruction and harvest found in both **ʿwʒy** and *oulos* makes the derivation of the Greek cluster from the Egyptian virtually certain. Chantraine follows Frisk and Boisacq in an attempt to link both *oulos* and *ioulos* to **οὔλος** "wool." Contamination from this root may have influenced the meanings of "first down" or "catkins" but could hardly have affected "sheaves."

Chantraine gives two entries for **ἀκτή** (H). The first is a precipitous slope. He derives it from the widely used hypothetical PIE root **ák** in a special sense. The second lemma for *aktē* is that used as a formula **Δημήτερος ἀκτῆν**, associated with the cult of Demeter and assumed to mean the "flour" of corn or barley. In Hesiod's *Works and Days*, however, it is associated with Demeter, winnowing and a threshing floor.⁷⁸ For Chantraine, the etymology of *aktē* in this sense is unknown. The two meanings can be reconciled by considering the Egyptian **ḥtyw**. The basic meaning is "platform." Written with **𓆎** (O40) it was "terraced hillside" as in Sinai and Lebanon. Otherwise, it meant "threshing floor."

While these Greek words have many different meanings, **στάχυς** (4) has even more: "ear of corn, plants, shoot of a plant, star, bandage round the abdomen." Fick, Frisk and Chantraine relate it to an Indo-European root, *stengh "sharp, sting." This does not begin to explain the full semantic range, but an etymology from the Egyptian **šdwh/ḥw** does. The basic meaning of this is "embalm." It was used in the rituals around the symbolic burial of Osiris in the month of Khoiak. In the Eighteenth Dynasty it was "the custom to make a figure of Osiris as a mummy from a linen bag which was stuffed with corn. If this was watered, the corn sprouted through the meshes of the bag so that the god was seen to grow."⁷⁹

The derivation of **σίτος** *sito* "wheat" either from the Egyptian **swt** or the Sumerian **zid** "wheat" or from both was discussed in Volume 2.⁸⁰

Livestock

Most domestic animals in Ancient Greece had Indo-European names. Nevertheless, a number had supplementary terms, which cannot be explained in this way. Many of these “extra” words can be plausibly explained as having derived from Egyptian or Semitic.

Although not listed as an Afroasiatic root by Orel and Stolbova, an interesting semantic cluster collects around the Egyptian trilateral **ibʒ**.

The Egyptian biliteral **ib** determinative  (E8*) belongs to an Afroasiatic root for “kid” also found in Beja and West Chadic.⁸¹ The implications of “frisky” are apparent in the lengthened **ibʒ** “dance” and with the nominal suffix *-w* in **ibʒw** “barbary sheep.” With a medical determinative, **ibʒ** is thought to be “laudanum.”⁸²

As a goat, **ibʒw** appears to be reflected in the Greek **αἰπόλος** (H) “goat”⁸³ and **ἔπερος** (6) “ram.” Chantraine explains the first as **αἶξ**, **αἰγός** “goat” dropping the final -g with a slightly puzzling suffix and **éperos** as **ἐπι** + **εἶρος** “who carries wool.”

Also, **ibʒ** “dance” appears to be the origin of **ἡπίαλος** (6) “shiver, fever.” Chantraine views with sympathetic skepticism a derivation from **ἥπιος** “sweet, benign.” Thus, “benign fever”! Also, **ibʒ** provides an etymology for the suffix **-μβος**. This occurs in **ἱαμβος** “verse, satire” and in **Ἰάμβη**, the person who made Demeter laugh. Chantraine sees this as a possible loan. Then there are **ἴθυμβος**, **δῖθύραμβος** and **θρίαμβος**—all songs and dances used in the cult of Dionysos. Chantraine links them all to *iambos* for which he has no etymology.

In addition, **ibʒ** or **ibr**, the Late Egyptian *ybr* written with  (M2) “plant, unknown drug,” appears in one meaning of **αἶρα** (4) as “poisonous intoxicating herb in the wheat,” “darnel,” which causes those affected to dance wildly. The Latin *ēbrius* “drunk,” for which Ernout and Meillet can find no satisfactory etymology, also seems to derive from *ybr*. The vulgar Latin *ebriaca* and the French *ivraie* preserved the original sense of ergot or darnel. *Ivraie* also provides a plausible origin for the English “ivy” which is supposed to have the same effect. A phrase from a pop song of the 1940s: “and little lambs eat ivy, a kid ‘ll eat ivy too, wouldn’t you?” brings us full circle.⁸⁴

The Egyptian **idr** was a general collective: “herd” of cattle or elephants, “flock, gaggle” of geese. Despite the distinction between ^ʔ*aleph* and the *ʿayin*, or even *ḡayin*, this term may well be related to the Hebrew *ʿeder* and the Aramaic *ʿadrâ* “flock, herd.”⁸⁵ The Greek **ἀθρόος** (H) “crowd,

squeezed, assembly” has no plausible Indo-European etymology. Frisk and Chantraine are skeptical of the idea that it belonged to a word family whose only other member is the Sanskrit *sadhry-añc-* “united.”⁸⁶ Either the Semitic or the Egyptian etymology is preferable. Although the Semitic form is closer phonetically, some connection with Egypt is suggested by what appears to be a calque between the Greek ἄλλόθροος “speaking another language” and the phrase *ky idr* “another herd” used by the Middle Kingdom “factional” (fictional and factual) figure Sinuhe to refer to himself as an Egyptian in Syria.⁸⁷

As does English, Greek has many words for pigs. The ὕς and σῶς probably—as Chantraine suggests—was borrowed from an Indo-European language that retained the initial *s-*. Despite the Ancient Egyptian suspicion of pigs, it may well be that a number of the other similar Greek terms come from Egyptian.

Rri, Coptic *rīr* with variants *raare* and *raire* “pig” provides an etymology for the Alexandrian term ἔρραος (2) “boar, ram.” According to the ancient lexicographer Hesychios, Ἐρρος was an epithet of Zeus.

In Chapter 8, I discussed the many correspondences between the Egyptian /š/, originally /ḥ/, and the Greek /kh/. In the light of this correspondence and that between /3/ and /r/l/, the Egyptian š3 “pig” may well be the origin of the Greek χοῖρος (H).⁸⁸ According to Frisk, no “unobjectionable” etymology exists for this word. He sets up two mutually exclusive hypotheses. One is a root *ghor-yo “bristly or hairy beast.” The other is to link it to the Armenian *ger* “fat.” Because of doubts about the initial, Chantraine prefers the first explanation. Neither Frisk nor Pokorny, who proposes a root *ḡhers, relate these to the Old Norse *gríss* “young pig.”⁸⁹ On the other hand, σίαλος *sia₂ro* “fat pig,” for which Chantraine can find no etymology, could well be a later borrowing from š3. If this is the case, it shows, once again, that the Greek shift *s>h* antedated the Egyptian loss of the consonantal value of /3/.

In Chapter 8, I discussed the origin of the Greek *ethnos* from the Egyptian *tni/w* “census, numbering of crops and herds.”⁹⁰ This provides a good etymology for the main portion of εὐθeneω (5) “flourishing of flocks.” After some hesitation, Chantraine reconstructs a PIE root *dhe, which he finds in the Latin *fēnus* “interest on capital,” because wealth was originally seen in terms of cattle. Ernout and Meillet do not mention this possibility.

For s3 “cattle hobble” σειρά “cord, lasso, line,” Chantraine is skeptical about all the proposed Indo-European etymologies.

Birds

There are relatively few examples of bird-related forms but those that do exist show the presence of Egyptian words in this semantic region supplementing those from Indo-European.

To begin with, ***qw** “cormorants” provides a strong etymology for **καούξ** (H) “sea bird.” The -ax is the standard suffix for animals and birds and is found, for instance, in **ιέραξ** “hawk.”

In Chapter 9, I discussed the derivation of the Greek **αὐχὴν** “neck of men or animals” and **αὐχενίζω** “break the neck of a victim” as being from **wšn**, “wring the neck of poultry.” In that same chapter, I also discussed ***p3 s3b** “dappled, multi-colored plumage” as the origin of **ψάρ** (H) “starling, speckled.”⁹¹

There is a common Afroasiatic root *pVr “jump, fly.”⁹² Orel and Stolbova also postulate a root *pa’ur “dove,” examples of which they find in West and Central Chadic. They also include Egyptian p’rt.⁹³ The Chadic cognates ensure that, although **p’rt** is only first attested in Late Egyptian, it must have existed earlier. The Coptic forms are *pēre* (S) and *pēri* (B). On this basis, Vycichl reconstructs a form *pe3’et or *per’et “quail, pigeon.” These words provide a plausible etymology for the Greek **πέλεια** (H) “pigeon.” Chantraine sees this word as deriving from the bird’s color **πελιός**, **πελιδνός** and **πολιός**.⁹⁴ The actual color represented by these terms is uncertain. It appears to have included “gray,” “off white” and “blue.” These, as Chantraine suggests, are very appropriate for doves or quails. Apart from seeing the three color terms as related, he provides no etymology for them. All in all, the color terms more likely derived from the birds, rather than the other way around, and *péleia*, as well as **παλεύω** (5) “to act as a [bird] decoy,” derived from the Egyptian p’rt.

The Coptic word **παροι** “little bird, chick, hen” has a precedent in the Demotic *phγ* “young bird.” This word provides an etymology for the Greek **φάψ-παβός** (5) “pigeon, dove.” The uncertainty of the initial suggests a loan. Chantraine sees *pháps-pabós* as a variant of **φάσσα φάττα** with approximately the same meaning. The phonetics are simply too far apart. As I discussed in Chapter 5, the alternation -ss-/ -tt- is often an indication of the Semitic *tsadeh*.⁹⁵ In this case, there is a post-biblical Hebrew word *patshân* “finch” that derives from Biblical $\sqrt{\text{ptsh}}$ “to break out,” specifically in shouting and song. Thus *pháps/pabós* and *phássa/phássa* come from two different roots in two different Afroasiatic languages.

M3' 𓆎 (H1) “pintail duck” provides a plausible etymology for the first element in **μελεαγρίς** (4) “African guinea fowl.” Both Chantraine and Frisk assume it is a loan word.

H3w was an undetermined species of wild fowl. The Greek **οὐρία** (2) was a type of duck. Chantraine describes the etymology of this word as “obscure.”

The Egyptian earth god Gb(b) was identified as **gb** “goose.” In Hellenistic times Gbb was transcribed into Greek as **Κῆβ**. Thus Gbb provides a good etymology for **κέφος** (4) “stupid bird,” possibly a petrel. Chantraine is interested in the gemmination but can provide no etymology.

The Middle and Late Egyptian **gmt** “black ibis” shifted in meaning to become Demotic *kymy* and Coptic *ḥaime* “hen.” Černý, Vycichl and Liddle and Scott all accept that this is the origin of the Greek **καίμιον** (4^{CE}) “chicken.”⁹⁶ Neither Frisk nor Chantraine include a lemma for this word.

Trp “edible bird” provides a good etymology for **θραυπίς** (4) “small bird.” Chantraine does not give an etymology.

Implements and containers

The significant number of examples of this section suggests either that new Egyptian agricultural technology was introduced into Greece or that Egyptian terminology in this area was added to the existing native words or replaced them altogether.

Orel and Stolbova postulate an Afroasiatic root *wurVm “roof.” They base this on a West Chadic form *wurVm “cover, thatch” and the Egyptian **wrmwt** “awnings, roofing.”⁹⁷ The word’s determinative of a sharply pointed roof is not contained in the Gardiner list. Vycichl sees the Coptic *ualme* or *uolme* “something to let” as coming from *wlm*. A number of important Greek borrowings apparently come from this. Before discussing these, however, we must consider two agricultural terms. The first is **ῶλέν(η)** (3) “matting or shelter used to bind or cover bricks.” (This is not to be confused with **ῶλέν(η)** “elbow,” which has a clearly Indo-European etymology.) The second term is **ῶλινου**, a Cypriot term for “sheaves of barley.”

In Chapter 8, I examined and gave examples of plausible etymologies in which an Egyptian /m/ was rendered as /ph/ in Greek.⁹⁸ The Greek **ῥοφος** (H) meant “roof, made of reeds” and **ῥοφή** (H) “roof.” These have been associated with the verb **ῥέφω** (5) “to roof.” Here

there is a semantic identity with *wrm* and the vocalization of the earlier attested nouns

To turn now to more wide-ranging terms: οὐρανός, ὠρανός in Doric and ὄρανος in Lesbian meant “vault of heaven,” seen as made of bronze, iron or crystal. The personification of heaven, the god Οὐρανός, Uranos, comes from this. Aristotle used *ouranós* as “vault” to describe the palate of the mouth, or a “tent” or “pavilion.” Frisk and Chantraine reject—on strong phonetic grounds—the tempting link *ouranós* to the Sanskrit Varuṇa, the early Hindu god of the sky. The phonetic bounds of loaning being less stringent than those of genetic relationships, *wrmwt* provides a more plausible etymon.⁹⁹

*Ολυμπος (H) or Οὔλυμπος is the name of various mountains in Greece, notably the one in Thessaly believed to be home of the gods. Chantraine believes that as a toponym it could simply be a Pelasgian word for “mountain.” Of course, this is possible, but the semantic similarity with Ouranós, with which, as Martin Nilsson observed, Olympus is frequently paired, offers a reason for preferring derivation from *wrmwt*.¹⁰⁰ In one passage from the *Iliad* the two are contrasted: Ouranós is in the sphere of Zeus; Olympus is part of neutral territory.¹⁰¹ Elsewhere, however, the two mountains are presented as parallel. For instance, in Book 1 of the *Iliad* Athena visited Achilles “from heaven” (οὐρανόθεν) but 25 lines later returned to Olympus (οὐλυμπόνδε). Later still in that book, Thetis goes up to μέγαν οὐρανόν οὔλυμπόν τε as the same place.¹⁰² In Book 15 of the *Odyssey*, Zeus thundered from the two peaks alternately in the same passage.¹⁰³ The same parallelism occurs in some oaths. Finally, there is the mention in Sophokles’ *Oedipus Tyrannus* to *Ολυμπος ἀπείρων “boundless Olympus.” Most translators simply omit the line in which the reference occurs, especially since it also contains other puzzles. Nevertheless, the Italian scholar Salvatore Quasimodo rendered Olympus as *cielo* “heaven,” thus increasing the ambiguity between *ólympos* and *ouranós*.¹⁰⁴

The Egyptian *s3* is written with the determinatives  (V17), according to Gardiner a “rolled up herdsman’s shelter of papyrus,” and  (V16) undoubtedly a “hobble.” It meant “protection, amulet.” The hypothetical ***p3 s3** provides a plausible etymology for ψάλιον and ψάλόν *pasaro* in Linear B. The words’ meanings are not certain but they include “curb, chain for a horse, harness and open U-shaped ring.” From this, the term extended to “arch” and “vault and drain.” The first determinative

would also seem to be represented by **ψαλῖς** (2CE). Perpillou describes this glyph as “scissors, made from a single blade bent into a rounded U.” Neither Frisk nor Perpillou see a sure etymology for this cluster.

The derivation of **πίθος** “large wine jar” from ***pʒth** “beer jug” was considered in Chapter 9.¹⁰⁵

In 1967 Constantine Daniel proposed deriving the Greek **μᾶνης** (3) “a type of cup” from the Egyptian **mn**, **nni** later **mnt** “jar, measure of beer.”¹⁰⁶ A further possible loan is **ἀμνίον** (H) “vase to receive the blood of sacrifice.” Chantraine denies any connection to **ἀμνός** (5) “lamb,” and he has no etymology for *ammon*. The avoidance of initial double consonants by adding prothetic vowels was discussed in Chapter 5.¹⁰⁷ A further loan from *mn-* is **μῶϊον** (2) “box, jar.” The omega in this indicates that it is a later borrowing than **μᾶνης** after, rather than before, the Egyptian shift *ā > ō*. For this shift, see Chapter 5.¹⁰⁸

The derivation of **μέλη** “sort of cup” from **mr** was discussed in Chapter 10.¹⁰⁹

Mr “milk jar,” the Coptic *maris*, provides an excellent etymology for the Greek **μάρις** (4), a liquid measure consisting of six κοτύλαι.

The possible, but hypothetical form, ***r-qn(i)** “mat, basket” provides one origin for **λίκνον** (H) “winnowing basket, cradle.” Chantraine follows Pokorny who, basing himself on the metatheses **νεῖκλον** and **νίκλον**, related it to the Lithuanian *niekóju* “winnow.” Either or both would provide plausible etymologies for *líknon*. Frisk and Chantraine subsume *líknon* under **λυκμάω** (H) “to winnow, destroy.” In Middle Egyptian the word *qmʒw* has been tentatively explained as “winnow,” with the personal suffix -w. This interpretation was based on context and the common Egyptian word *qmʒ* “reed” and things made with reeds, like mats and baskets. This is discussed in this chapter.¹¹⁰ Thus, here again it would seem legitimate to hypothesize a Coptic form **iri qmʒ *rə-kam* “make winnow” as the origin of *likmāō-*.

The derivation of **νέμω** “nomad, pastoral, to distribute or allocate grazing land” leading to “law” from the Egyptian *nni* “to travel” and *nniʿw* “bedouin, herdsman,” was discussed in Chapter 12.¹¹¹

The Egyptian plural form **ḥʿw** had a wide range of meanings, varying from “weapons” to “funeral furniture” “ships’ tackle” to “utensils.” They could all be put under the heading of equipment. In Late Egyptian the form is also attested in the specific sense of “basket, bucket.” The phonetic shifts of the signs conventionally rendered /š/ and /ḥ/ were described in Chapter 8.¹¹² Almost certainly, at some stage Greek

speakers would have heard it as /sk/. The Greek **σκεῦος** (5) was as wide-ranging as *h^cw*. Chantraine summarizes: “recipient, utensil; above all in the plural **σκεῦη** utensils of all sorts in the house, culture, navigation, cases, equipment, objects.”

Hbbt “type of jar” provides a suitable origin for **σκούφος** (H) “jar, jug” used by peasants for milk etc. Chantraine provides no etymology.

The Middle and Late Egyptian **hnr** has a range of meanings around the concept of restraint: “prison, harem” but also “reins, restraint.” In Coptic the central sense shifted to harem and marriage, and the phonetics to *šelet* (SA) and *šelet* (B). According to Vycichl, the vocalization is uncertain because of internal borrowing between dialects. According to Frisk, the Greek **χαλῖνός** (H) “reins, anchor” is related to the Sanskrit *khalina-* “bit.” Chantraine, however, points out that the great lexicographer of Ancient Indian, Manfred Mayrhofer, maintains that the Indian word is a borrowing from the Greek. Therefore, Chantraine sees the etymology of *khalinós* as “uncertain,” probably a loan. The Egyptian word provides the origin.

S3w “wall” 𓆎 (Aa18) in Late Egyptian is *s3wy*, *s3wt* “property” **σιρός** (5) “silo, granary.” Chantraine states “no etymology.” Another source of *sirós* may be from Semitic, attested in the Akkadian *saru* cycle of 3600; it was transcribed into Greek as **σάρος** or **σαρός**. A Canaanite form of this may be the source of **σωρός** (H) “heap of wheat, heap” (**σωρεύω** “accumulate” and **σωρεία** “arithmetic progression”). Chantraine has no etymology for any of these words.

Κάβος “measure of wheat” is generally thought to be a transcription of the Hebrew *qab* “measure of capacity” because it first appears in the Septuagint. Frisk and Chantraine, however, point out that the ancient interpretation of the word **κάβαισος** “glutton”—attested from the fourth century—as **κάβος** and **αῖσα** indicates that the former might well be older. In this case, *kábos* could come either from the Canaanite or from the Egyptian **qby** Coptic *kabi* or *kēbi* “jar, measure.”¹¹³

From the point of view of semantics, **qrht** “pointed ceramic vessel, or basket” provides a plausible origin for the Greek **κρωσσός** (5) “water jug, funerary urn.” Because of the /ss/ and the practicality of the object, both Frisk and Chantraine are inclined to reject theories that it is cognate with the Irish *croccan* and the Anglo-Saxon *crocca*. They prefer a Mediterranean origin. The /h/ might explain the long vowel and the final /-t/ often rendered /-is/ in Greek, the sibilant. Nevertheless, the derivation of *krōssos* from *qrht* can only be described as reasonable or plausible.

The stronger derivation of **κάλαθος** from *Qrht* or *krht* will be discussed in Chapter 18.

The Afroasiatic root *q^wad and the Egyptian **qd** “make, create, make pots by circling, circle” were discussed above.¹¹⁴ The West Semitic: *kad* “jug, jar” is attested in Ugaritic, Phoenician and Hebrew. As *kad* is generally thought to be of unknown origin, an Egyptian origin seems likely despite the distinction in both languages between /q/ and /k/.¹¹⁵ Frisk describes the Greek **κάδος** as “Mediterranean,” while Chantraine following Emilie Masson sees the Greek word as a Semitic loan.¹¹⁶ A Semitic loan is probable, but a borrowing directly from Egyptian is also possible. Having agreed that *kados* has a Semitic origin, it is surprising that Chantraine should describe **κηθίς** “vase” with a derivative **κηθάριον** “urn used in voting” as having “no etymology.” He follows Ventris and Chadwick in seeing an early form of *kâthis in the Mycenaean *kati*. *Kati* could almost equally well be seen as a prototype of *kados*. In any event, Maria-Luisa Mayer argued plausibly that *kēthis* was Semitic.¹¹⁷

The determinative **†** (V19) is generally believed to represent a “hobble for cattle,” but it is also used with other significations: in the words *tm3* “mat,” *h3r* “sack” and in other names for woven and wicker work objects. In particular, it appears in the Late Egyptian *g3sr* “a measure for milk.” This provides a plausible etymology for **κρησέρα** (4) “sieve or strainer.” The phonetics are certainly better than Chantraine’s tentative links to the Latin *cribrum* or the Irish *criathur* “sieve.”

The derivation of Greek **τινάσσω** (**τινάξαι, τινάγμος**) “shake, winnow” from an Egyptian *dit nqr “cause to sift” was discussed in Chapter 9.¹¹⁸

The early form **t3b** “vessel, bowl”—*tbw* in Late Egyptian and *jop* in Coptic—provides a good etymology for **τρύβλιον** (5) “bowl, basin.” Frisk and Chantraine agree that it has “no etymology.” Another strong possibility is that *t3b* is the etymon of **τράμπις** (3) “barbarian boat.” This the lexicographers see as a loan word.

Some of the Egyptian words covered in this section have remained practical and specific in Greek: for example, *máris* “a liquid measure” and *khalinós* “reins, anchor.” Others, such as the Egyptian *wrmt* “awnings, tent roof,” have risen in Greek from the practical to the abstract and transcendent, such as *ouranós* and *Olympos*. Taken together the range shows the profound penetration of Egyptian culture at many different levels of Greek society.

COOKING

Vocabulary indicates that Egyptian influence was particularly intense in the cultural area of cooking and eating.

During the Old Kingdom the sign $\bigcirc$ (w6) was used to denote “a particular type of vessel.” It was used as a determinative in the word *whꜣt* “cauldron.”¹¹⁹ In the Middle and New Kingdoms $\bowtie$ (w8) and $\square$ (w7) succeeded $\bigcirc$, both meaning “vessels,” and used as a phonetic/determinative **ꜣb**. The Greek **λέβης** (H) means “cauldron, basin.” Frisk wants to link it to *lopós* “shell, rind” but admits that it may be a foreign word.¹²⁰ Chantraine states bluntly “no etymology.”

Frisk and Chantraine derive **λαφύσσω** (H) “swallow gluttonously” from the Indo-European root *lap’ or *lab “lick, lap.” The insistence on greed suggests that it was influenced or contaminated by **ꜣf** in Middle Egyptian and **fy** in the later language. Both these forms mean “glutton, gluttony.” Vycichl reconstructs a form *ʒāfi’ or *af[y]. The first provides an excellent phonetic parallel with *laphyssō* to match the semantic one.

The Egyptian **ꜣm** is “bind for sacrifice”; **ꜣm n** means “to offer to.” The Greek **ἑρᾶνος** (H) is “a religious feast to which everyone brings a portion.” Chantraine sees its origin as “obscure” but suggests a connection with **ἑορτή** (H) “festival” and **ἑορτικός** “offerings given at festivals.” Neither he nor Frisk can find a clear etymology for these two forms. There are, in fact, plausible sources in **ḥꜣw ḥt** “special offering” or **ḥꜣw-ḥr ḥt** “abundance of offerings.”

The semantic parallel between **ꜣ w** “breakfast” and **ἦτα** (H) “provisions for a voyage” is excellent and there is no phonetic objection to the etymology. Chantraine tentatively suggests a connection to *eimi* “to go.”

The scholiasts stated clearly that **ἔρπις** (ꜣ) was an Egyptian word for “wine.” Modern lexicographers have found the etymon in the Egyptian **irp** “wine.” They cannot, however, explain the aspiration in the Greek word. At least one other example of Greek hypercorrection of this type is found in **ἱερεύς** “priest,” which comes from a cluster of words concerned with religion and its organization around the biliteral **ꜣꜣ**.¹²¹

Another Greek word that may well derive from *irp* is **ἔλπος** (ꜣ) “leather bottle.” The poet Sappho uses it to refer to a container for wine; later writers use it as a bottle for oil. Chantraine takes the latter as the basic sense and links it to an Indo-European root *selp, which we find in the English “salve.” He is unconcerned about the lack of aspiration.

In Volume 2, I discussed the derivation of Ἰατλας and Ἰατλάντις from the Egyptian *itrw* “river, sea.”¹²² Two fish names Ἰτελι (4) and Ἰθουλίς (2), for which neither Thompson nor Chantraine can find an etymology, would seem to have the same origin.

The Egyptian *wḥ* “pure” was mentioned in Chapter 9 in the discussion of **p3 wḥ* / Phoibos.¹²³ Two extensions are the Middle Egyptian *wḥt* with the determinative for meat “meat offering” and in Late Egyptian *wḥt* with the sign for a house as “kitchen.” Lexicographers have great difficulties with ὀπτός (H) “meat roast on a skewer.” Chantraine is inclined to accept Benveniste’s view that it should be seen as related to πέσσω (H) “cook, ripen.” This suggestion requires a hypothetical form *(ə)p-k^w, with, in the case of *optós*, a suffix -to. A derivation from *wḥt* seems simpler. A later borrowing found in οἶβος (2CE), a butchery term for the “back of a bull’s neck,” was also mentioned in Chapter 9.

Péssō and possibly ἔψω (5) “cook, boil” and ὄψον (H) “side dish or relish” probably derive from *psi* or *psw*. This became in Coptic *pise* prenominal *pes(t)*- and presuffixal *past*: “cook.” Chantraine declared that the etymologies of *hépsō* and *ópson* were “obscure.”

The derivation of πόρκος “wicker fish trap” from **p3 rq* “the basket” was discussed in Chapter 9.¹²⁴ In Late Egyptian *rq* also meant “weapon case.” This provides reasonable etymologies for ὄλλιξ (2) “drinking cup made of wood” and ὄρακιν (3) “pan.” Chantraine has no explanation for either.

It is possible that the Late Egyptian *kk* “loaves,” became the Demotic *k k* “type of cake” and the Coptic *ča(a)če* with the same meaning. In any event at least the latter two are related to the Demotic verb *kk*, Coptic *čōč* “to roast, bake.”¹²⁵ Černý, following Alfred Wiedemann, accepted *k k* as the etymon of the Greek κάκεις, κακεῖς “kind of bread.”¹²⁶ Neither Frisk nor Chantraine entered a lemma for this.

ḏn “crucible, smelting furnace” provides a strong etymology for ἔτνος “thick soup, puree.” Neither Frisk nor Chantraine supply any explanation for the word.

The Egyptian *w3i* “roast? grains,” is a plausible etymon for οὐλαί (H) “grains of barley put on head of sacrifice.” Frisk and Chantraine agree that the term is ancient and postulate an initial *F/w/* but go no further.

The derivation of “oasis” from *wh3t* “oasis” has been mentioned above.¹²⁷ Its basic meaning, however, was “cauldron, pot.” In this sense it is a possible etymon for ἡθέω (4) “to filter.” Chantraine considers re-

moving **-θω** as a suffix, disregarding the lack of aspiration and, thereby linking it to Slav and Germanic words with initial *s-* and meaning “sieve.” The Egyptian etymology is worse semantically and hardly better phonetically. However, the second century CE humorist Athenaios, who was born in Naucratis in Egypt, claimed that a derivative **ἡθάνιον** (3) “collander” was a term used in Egyptian households.¹²⁸ Muss-Arnolt tentatively suggested that the source was from Egyptian “*heti*.”¹²⁹ The vowel is, of course, unknown and there is the slight problem with aspiration, even so neither **ḥti* “bowl” nor *wh3t* can be simply accepted or dismissed. In any event, given the far-fetched quality of the Indo-European etymology, *ethēō* and *ethánion* almost certainly derive from Egyptian.

The term **B3kb3k**, a “type of cake” was presumably related to **p3q**, a “fine or flat cake.” **βάραξ** (2) was a type of cake which Chantraine saw as “possibly foreign.” The likelihood of an ancient loan is increased by variants **βήραξ** in Attic and **πάραξ** at Thera.

B3d “jar” corresponds well with **βλαδύς** “flask.” Chantraine puzzlingly subsumes it under **ἀμαλδύνω** “efface” and links it to the Indo-European root **mol* “soft, tender.”

The Late Egyptian **br**—Coptic *bōre*, Modern Egyptian *fori*, Arabic *buri* “mullet”—provides a certain etymon for **βωρεύς** type of “mullet with which the Egs. make conserves.” Thompson and Chantraine have no doubt about the derivation.¹³⁰

One sense of the word **βήσσα** is as a cup that is large at the bottom and narrow at the top. Chantraine sees it as merely a metaphorical use of the word *bēssa* “wooded glen or gorge.” Constantin Daniel interprets a passage from Athenaios to claim that the name came from the shape of *Bes*.¹³¹ Chantraine is unable to find an acceptable etymology for the basic meaning of **βήσσα** (H). There is, however, a good one from the Semitic $\sqrt{\text{bss}}$ found in the Hebrew *biṣṣāh* “swamp.”

The Egyptian origins of **πῶμα** “container for bread” **πυραμῖς** “cake” and **βασυνίας** “type of cake offered at Delos” were all discussed in Chapter 9.¹³²

With /3/ as a liquid **bd3** “large jar [flat bottomed?]” fits well with **πατάνη** Sicilian. **βατάνη**, Latin *patera* or *patella* “large cooking pot.” Chantraine sees the cluster as “Mediterranean.”

P3q could also be the origin of **πλίκιον** (2CE) a “type of cake” for which Chantraine provides no etymology.

P3t “cake or loaf used in offerings” provides a good etymon for

παλάθη “dried fruit, pressed in a mold.” Chantraine dismisses Lewy’s Semitic derivation of the word. He prefers the proposal that *paláthe* is cognate with the Old High German *flado* from which comes our “flan.” If these two are connected, *flado* could equally well be a loan. Another plausible later borrowing from *p3t* is **φθοῖς** “sacrificial cheese cake, offered to the gods.” Chantraine is inclined to see it as a loan.

The lexicographer Hesychios describes the obscure word **φήρος** as “ancient food for the gods.” The traditional comparison has been with the Latin *far* “wheat flower used in sacrifices.” The semantics are indeed very close. Chantraine, however, describes the phonetic derivation as “very uncertain.” One possible solution is that both derive from *p3t* and its plural *p3wt* “offerings, cakes, loaves food.”

In Chapter 7 I referred to the derivation of the Latin *panis* “bread” from the Egyptian *psn* a loaf.¹³³ I did not mention the West Greek and Messapian **πανός** “bread” used in Apulia. Another borrowing from *psn* is **παξαμάς** “biscuit.” Chantraine follows the tradition that *paxamās* derives from the name of an otherwise unknown baker. This seems less probable than the Egyptian etymology.

Mhi “milk jar,” **mhi t** “milch cow,” provide a source for **ἄμης** “milk cake.” Chantraine provides no etymology.

Mg3r “broil or grill” **μαγειρεύω** (4) “cook meat” is first attested in Late Egyptian. Because of its lateness and the alternatives *m3qw/mq3w*, James Hoch believes that this could well be a loan into Egyptian from the Semitic $\sqrt{qly}$ to “bake or roast.”¹³⁴ Whether or not he is correct in this, there is no reason to doubt Redford’s suggestion that, given the precision of roasting meat, *mg3r* should be related to *mageireúō*.¹³⁵ The /g/ in the Greek form, indicates that the most plausible sequence is Semitic>Egyptian >Greek. The Latin *magirus* “cook” comes from the Greek. *mageiros*. Chantraine concludes “no established etymology.”

Nd3 “measure for loaves and dates” makes a plausible etymon for **ὀνθυλεύω** (4) “to stuff or fill in cooking.” Chantraine writes about this “these culinary terms are without etymologies.”

For the derivation of **ἄθάρη** “flour casserole” from **ntr** see Chapter 10.¹³⁶ The Egyptian origin **ἄρτος** (H) from **rth** “bake” was discussed in Volume 2.¹³⁷

Hqr “hunger” provides a good etymon for **αἰκλον** (6) “Dorian evening meal.” As for its etymology, Chantraine states simply that it is “unknown.”

Another food-related etymology has parallels in the animal world.

The Greek **ἄλωπηξ** (6) or **ἄλωπός** “fox” appears to have a strong Indo-European etymology with cognates in the Latvian *lapsa* and Sanskrit *lopāśa* “jackal.” The likelihood, however, is that these are loans from Greek and that the original is the Egyptian **s3b** “jackal.” The variation *alōpēx*, *alōpos* and the prothetic *alpha* indicate a loan into Greek. Further arguments for this hypothesis are that jackals are rare around the Baltic and that Aristotle specified that *alōpēx* was an Egyptian fox.¹³⁸ Beyond this was the medical use of *alōpēx* to describe the “muscles of the loins.” This can be explained by the use of the determinative,  (F27) for *S3b*.

The two determinatives  (E17) and  appear to have been used for both “jackal” and “hyena.”¹³⁹ Although the standard modern reading of *s3b* is as “jackal,” a number of homonyms indicating “dappled” or “multi-colored” suggest that it was also widely used for the striped or spotted hyena.

In this sense *s3b* provides a plausible etymon for the Greek **σίλβη** (5CE) “cake made of barley, sesame and poppy seed.” Chantraine dismisses the suggestion that it is somehow related to the Hittite *šiluḫa* “type of cake” and describes it as merely a loan. The etymology of *psar* “[multicolored] starling,” from *p3 s3b* was discussed in Chapter 9.¹⁴⁰

The metathesis from *S3b*, to **sb3* “hyena” would explain the man-eating, cave-dwelling, monster of the wilds, **Σύβαρις**. Sybaris was equated with another man-eating monster **Λάμια**. This would seem to come from the Afroasiatic root **labi>* the Hebrew *lābī>* “lion, wild cat” or the Egyptian *3by* “panther” all deriving from the Afroasiatic root **labi>* “lion, wild cat, hyena.”¹⁴¹ Thus, many monsters of Greek myth can be explained as originating from large, fierce African animals.

Even the Saharan paintings indicate a delight in specially bred bicolored cattle.¹⁴² Egyptians and Cretans preferred them for sacrifice. *S3b* was also a term used for social superiors and high officials.

Sybaris was, of course, the name of a city in Lucania in southern Italy, famous for its luxury. The association between luxury and variety is always very close. It can also be seen in the synonym to *sybaris*, **ποικίλος** “many colored luxurious.” Thus, it seems more likely that Sybaris was named after its luxury **sb3* rather than the other way around.

Chantraine believes that the term **χαβίτια** (3) “receptacles for honey?” is an “obscure loan.” Oswald Szemerényi derives it from the Aramaic *ḥwt* < **ḥawita* “jug.”¹⁴³ This itself could be a loan from the Egyptian *šwbty* “jar.” The fact that the attestation was found in Egypt could indicate that *khabítia* came directly from Egyptian, but this is largely, if not entirely, nullified by the time required for the pronunciation of $\equiv$ as

/h/. On the other hand, **σέβις** (σεβίτιον)(5CE) “box” could well be a late borrowing from *šwbty*.

Šns “cake or loaf” provides a good etymology for **ἄχαινη** (?) “large loaf cooked for the Thesmophoria.” Chantraine states simply “without etymology.”

Strabo wrote that **κάκεις** or **κακείς** were a kind of Egyptian “loaves.”¹⁴⁴ In Middle Egyptian **ḳw** are “loaves,” perhaps confused with the form **ḳʕḳʕ** “eat” only attested in Late Egyptian.

As a verb **ḳfn** is “to bake” as a noun it is “loaf.” **καπνός** (H) is “smoke, smell of cooking to smoke, warm.” Chantraine sees it as cognate to the Lithuanian *kvepi* etc. “breathe.” This is almost certainly linked to **κάμινος** (5) “furnace, oven” (**καμιντήτης**) “bread baked in oven” **καμινεύς** “worker with a furnace” [there is an Egyptian form **ḳfnw** “baker”]. Chantraine sees the Greek terms as probable loans.

The Late Egyptian **krst**, *klst* in Demotic, was “bread made from spelt.” All scholars agree that this is the origin of **κυλλήστις** (5) “bread made from spelt.”¹⁴⁵

T-ḥd “white bread” *ht* in Demotic and *hat* in Coptic provides a good etymology for **θιώτης** (2CE) “type of bread,” Chantraine makes no etymological suggestion.

***T-ḳw(n)** “bread loaves for” is a plausible etymon for **θιαγόνες** (2CE) “type of bread provided for the gods.” Chantraine provides no etymology.

The Late Egyptian **t3ḥ** “souse, dip in water,” appears in the Greek as **ταριχεύω** (5) “pickle fish, put in salt.” Herodotos and others used it to describe “mummification.”¹⁴⁶ Chantraine has no explanation for this term and denies any connection with **ταρχύω** (H) “bury as a hero.” Chantraine denies any connection with *tarikheuō* on phonetic grounds and the semantic side by the fact that *tarkhuō* is never used to describe embalmment. He prefers to see it as a loan from Asia Minor and the Hittite root *tarḫ* “conquer.” The slight phonetic distinction between *tarikheuō* and *tarkhuō* disappears completely if they are both borrowings from a third language. As for the semantics the most heroic funeral of all, that of Patroklos, began with pouring honey into his nostrils.¹⁴⁷ The parallels between Egyptian pharaohs and Greek heroes that were discussed in Volume 2 also lessen the barriers between *tarkhuō* and mummification.¹⁴⁸

Drp “present offerings, provide a meal” and *drpw* “offerings, meal sustenance” would seem to be the origin of **δόρπον** (H) “afternoon meal, feast,” and **δόλπαι** (6CE) “small cake.” With metathesis of liquids, it also

can explain **δεῖπνον** (H) “main meal, feast.” Chantraine has no etymologies for any of these terms.

Dsrt “strong thick [red?] ale” provides an excellent origin for **ζωρός** (H) “pure and thick of wine.” Chantraine denies previous attempts to link *zōros* to the Sanskrit *jaru* “hard” and concludes “unknown.” With some phonetic difficulty *dsrt* could be the etymon of **ζῦθος**, which Theophrastos and later writers maintained was the Egyptian word for “beer.” Chantraine could not find an Egyptian etymology for this but Szemerényi proposed that *zythos* and the Sogdian *zwtk* were both borrowed from an unknown Scythian original.¹⁴⁹

Conclusion on cooking

Many of the Greek words in this section are related to religious offerings, but others are secular, although they may have derived from the religious. It should be remembered that sacrifices and offerings provided a significant part of the Greek diet. The profound Egyptian association with Greek religion has been a central theme of the whole Black Athena project, but this section further reveals the important role of Egypt in the creation of Greek sophistication and luxury.

MEDICINE

The “international” reputation of Egyptian medicine is well known. So too is the widespread acceptance of the idea that Greek medicine borrowed heavily from it.¹⁵⁰ Therefore, one would expect the specialized and often obscure Egyptian terminology to have influenced the Greek medical vocabulary.

ἰζῆ is the “appearance of pustule or wound.”¹⁵¹ **ἑρέθω** (H) is to “excite, inflame, a wound.” Chantraine sees the final **-θω** as a suffix and the root as found in **ὄρνομι** “excite, stir up.” The Egyptian etymology is closer in both its phonetics and semantics.

From the Greco-Roman period we have **ἰων** “pillar”; there are also *wnw*, *au(e)in*, *ou(e)in* “water channel?” **αἰών** (H) “spinal marrow, vital force, life” (later, long period of time).¹⁵² Chantraine sees it as cognate to the Sanskrit *āyu-* “vital force” and *āyus*, as well as the Latin *aevus* “duration.” It is clear that there is an Indo-European root here, but Egyptian also appears to be involved. Where Onians saw “spinal marrow” as the

primary sense of *aion*, Chantraine makes it secondary. The likelihood that Onians was right is increased by the fact that in Egyptian anatomy the spinal cord was seen as the vital force flowing from the brain to the penis.¹⁵³ The technical term for this was not *iwn* but *im3h*, which also meant “blessed state of the dead.”¹⁵⁴ Nevertheless, *iwn* as pillar clearly had physiological meanings, such as *iwn n fnd* “nasal bone” and sexual ones as in *iwn mwtf* the “pillar of his mother,” an epithet of Horus. This and *p3 *iwn*-Πατήων, Apollo will be discussed in Chapter 19.

iwh m was “to sprinkle, moisten” and in the medical vocabulary “to moisten with/in a drug.” In Greek **αιονάω** (5) “to bathe, moisten” is a medical term for which Chantraine gives no etymology.

The noun **inw** “produce, tribute,” is related to the verb **ini**, Coptic *eine* (S) or *ini* (B) “to bring, fetch, carry off.” In the last sense, it provides a good etymology for **ἀννυμαι** (H) “to take, seize, especially food.” Chantraine hypothesizes an Indo-European root *ai- “to give” found in the Tocharian B. *ai* and the Hittite *p-ai*, with a nasal infix. Although I did not in Chapter 12 absolutely rule out a semantic relationship between taking and giving in the case of the Greek *nemo* “to allocate” and the Germanic *nehman* “taking” such a switch is unlikely.¹⁵⁵ It is certainly not plausible, given the simplicity of *ai* and the existence of a strong Egyptian competitor.

A subordinate meaning of *ini* is “to reach, attain” and in compounds “to go to the limits.” See **ἀννυμι** or **ἀνύω** (H) “complete, go to the end.” Chantraine traces these to a hypothetical *sṇ-nu which he finds in the Sanskrit *sanóti* “win” and the Hittite *šanḫ-zi* “he looks for.” The semantics are loose and the lexicographer does not find any trace of aspiration in the Greek words.

In medical usage *ini* could mean “remove something harmful.” The Greek medical term **ινάω** (5) meant “evacuate, empty, purge.” Chantraine tries to link it to the Sanskrit *is-nā-ti* “set in motion, lance.” He admits that there is no indication in the Greek word of the long *i* required for the relationship with *is-nā-ti*.

Chantraine rightly points out **περίνεος** (4) “perineum” is “around the evacuation.”

ʿ3 was a medical term for “poison in the stomach.”¹⁵⁶ **Εξεράω** means (5) “to vomit, evacuate bowels.” Chantraine, basing himself on a scholiast’s comment on line 993 in Aristophanes’ *The Wasps*, interprets *exeraō* as “to earth” ἔρα. Clearly, punning was involved but the Egyptian etymon is considerably more precise.

ntyw “resin myrrh” is the origin of **ἀέντιον** which the lexicographer Hesychios defines as “the Egyptian for myrrh.” Chantraine willingly accepts that **μύρρα** itself comes from a basic West Semitic term *murru*.

In Chapter 8, I discussed the relationship between **ʕʕ** “many, numerous, plentiful, rich” and **ὄχλος** (5) and the developed meaning “pustule or bodily growth.”¹⁵⁷ In Chapter 5, I mentioned the word **ʕʕ** “straight-forward” as part of the compound **ʕʕ ib** “exact, accurate,” found in the Greek *akribēs* with the same meaning.¹⁵⁸ In medical terminology **ʕʕ** meant “make right, heal.”¹⁵⁹ **ἄκος** (H) was “remedy,” and **ἀέχομαι** “care for, cure.” Chantraine tries valiantly but unsuccessfully to find links to the hypothetical Indo-European root *ak “sharp.”¹⁶⁰ Thus, it is probable that *akos* is a borrowing from **ʕʕ**, again after /3/ had lost its consonantal force.

Chantraine describes **φάρμακον** (H) as “isolated in Greek, to the extent that that one should think of a borrowed term.” He tries to avoid this by linking *phar-* to **φέρω** “bear” and seeing *-akos* as a suffix for plants. Nevertheless, he concludes, “the question of the origin of **φάρμακον** is insoluble at the present state of our knowledge.” If, in the absence of an Indo-European etymology, one should consider a loan, the obvious place to begin is with Egyptian.

The association of *pharmakon* “plant or drug” with Egypt goes back at least to Homer: “For there [Egypt] the earth, giver of grain, bears the greatest store of drugs [*pharmakā*] . . . there every man is a physician, wise above human kind.”¹⁶¹ The suffix *-akos* can be explained by **ʕʕ** “cure remedy.” The initial *phar-* can plausibly be derived either from **p̄hr(t)** *pahre* (S) “prescription, remedy” or from the Demotic **p̄hr** or Coptic **phaher** (B) “bewitch.” The *-m-* could come from the preposition *m* “with.” While all the elements are present, I have not found the combination and, therefore, the etymology can only be classified as “reasonable.”

Two parallel words exist in Egyptian, **wbʕ** and **wdʕ**. **Wbʕ** “drill, open, explore” had as its determinative **ⲩ** (U26) “drill, boring a hole in a bead.” **Wdʕ**, written with **ⲩ** (Aa21) which Gardiner described as “a carpenter’s tool,” meant “to cut off, cut out.” In Greek there exists a cluster of words around **ὀβελός/ὀδελός** (H) involving the meaning “iron spit.” *Obeloi* or *oboloi* were used as currency. Six held together formed a handful or **δραχμή**.¹⁶² While Chantraine cannot explain the prothetic *o-* or anything else about the etymology, he argues that the alternation /b/-/d/ in *obelos/odelos* indicates an original labiovelar. It is more plausible to

suppose that the alternation arose through confusion between the two Egyptian words. Phonetically, the correspondence between *wbʒ* and *obelos* is excellent. In semantics there is an extraordinary parallel between *Wḏ* “be parted as the lips of a wound” and ὀβελαῖος “sagittal suture of the skull.” It is quite possible that 𓂏 was a “crown saw” for removing part of the skull. The Egyptians also practiced trepanning with drills.

Orel and Stolbova propose two Afroasiatic roots for “lung”; both are plausibly onomatopoeic: *fuf and *f[ü].¹⁶³ They set the Egyptian *wfʒ wfi* or *wpʒ* in the second series.¹⁶⁴ The Coptic forms are *ouof ouōf* (S) or *ouob* (B). Gardiner constructs an earlier *wāfʒew.¹⁶⁵ Chantraine sees ἀναφή “consumption” as having been contaminated by ἅπτω “touch” but also “light up.” He provides no etymology. On balance, I think the Egyptian etymology is less improbable.

The Late Egyptian *bki* “fruit or balsam tree” was borrowed from the Semitic ʕbk>, the Hebrew *bākāʔ*. The Greek βήξ (5) “cough, plant remedy for a cough.” A loan from Semitic or Egyptian seems more likely than Chantraine’s suggestion that it is onomatopoeic.

The Egyptian *pds* meant “pill, pellet.” In Greek πεσσός Attic πεττός was “an oval stone used in games” and, medically, “pessary.” The alternation in Greek could arise from uncertainty over the Egyptian sibilant. Chantraine describes it as a “substrate or foreign term” and agrees with Frisk in rejecting other attempted Indo-European etymologies.

The Egyptian *mt* “strip of cloth” appears in two forms in Greek. First there is μίτος (H) “thread, ribbon, tape.” Chantraine rejects all the etymologies cited by Frisk and describes *mitos* as a “technical term without etymology.” For μωτός (5) “bandage, lint,” Chantraine simply writes “unknown.”

Orel and Stolbova argue that the Afroasiatic root *mut “man” comes from *mawut “die” in the sense that all men are mortal.¹⁶⁶ From there it is possible, as Vycichl suggests, that one can derive the Egyptian *mtwt* or read, as I argue in Chapter 9, *mwtt.¹⁶⁷ This word has two apparently contrasting meanings: semen and poison. A parallel to this is the medical term ʕ “ejaculation, poison.”¹⁶⁸ Vycichl tentatively proposes that the two can be linked as “secreted materials, one from men and the others from snakes and scorpions.”¹⁶⁹ Μίτος appears in Orphic language as “seed,” which further strengthens evidence of Egyptian mysteries in Orphism.

R-dr “all, entire” and *r-drf* “to its end” as the origins of Λόθυρος, a

surname of Ptolemy VIII and a medical “purge” have all been touched on in Chapters 9 and 10.¹⁷⁰

Rpw “rot” provides an excellent etymon for **ῥύπος** (4) “dirt,” on skin, sheets etc. Chantraine gives no etymology.

In Egyptian **ḥ3yt** appears to have a general meaning of “disease.” The Greek **χῆρας** (6 CE) has the more specific meaning “fissures in the feet.” The etymology remains plausible, despite the semantic distance because of the lack of a plausible alternative. Chantraine rejects attempts to link it to a Germanic form *gīr* “vulture.”

The fundamental sense of **ḥm** is “not to know, be ignorant,” but it has the extended meanings of “unconscious, paralyzed.” The rare Greek word **ἰκμαμενος** means “wounded.” Apart from speculating whether the basic root was **ἰκμ-**, **ἰγμ-** or **ἰχμ-** (any of which would fit **ḥm**), Chantraine has no idea about its origin.

In 1953 Jernstedt plausibly proposed that **στήθος** “breast, seat of emotions” derived from ***st ḥ3ty** “place of the heart, emotions.”¹⁷¹ Chantraine sees the etymology as “obscure.” He mentions the Sanskrit *stāna* “woman’s breast” but has no explanation for the final **-θος**.

On the basis of the Coptic forms *saēn* (S) and *sēni* (B), Vycichl maintained that the original vocalization of **swnw** “doctor” was probably ***synw**. This speculation is weakened by what appear to be Greek borrowings that suggest ***sawono**. **Σωννύω** (H) is to “save from death, keep alive, preserve” but is part of a cluster around **σώζω** and **σῶς**, originally **σῶος** (H), “save, safety, good health.” Chantraine reasonably reconstructs **saf**. He then goes on to associate it with Sanskrit words based on the root ***tav** “strong” and to reconstruct a rounded form ***tʷ ú**. This hypothetical structure makes the problems with an etymology from *swnw* pale into insignificance.

According to Orel and Stolbova, an Afroasiatic root **√ḥVsaw** means “drink.” Vycichl sees this word as related to the Egyptian **swr** with the same meaning.¹⁷² In medical terminology, *swr* was also used for “purgative, vomit.”¹⁷³ **Σῦρω** (5) is “to drag out, slime trail, sweep, purge emetic.” Chantraine doubts any connection to the Old High German *swerben* “wipe out.”

Sbsy is “to cause to flow forth” or, medically, “to make vomit, to effect a cure.”¹⁷⁴ The Greek **σβέννυμι** (H) with the root **√sbes** “extinguish” applies to storms, anger, rage etc. Chantraine sees an Indo-European root ***gʷes** “extinguish, exhausted, disappear” attested in Baltic and Sanskrit. But he has difficulties attaching *sbennūmi* to it.

sm3 “kill, destroy illness,” written with the determinative for knife  (T30) make an excellent etymon for **σμίλη** (2CE) “knife, chisel, and surgeon’s scalpel.” Chantraine follows Pokorny who attaches *smīlē* to an Indo-European root *smi-tu found in Germanic. Originally it meant “carpenter” but later became “smith.” The Egyptian derivation is more precise in both sound and meaning.

Šhn “sweetbread, pancreas, kidney in suet” provides a good etymology for the medical term **σαχνός** (2CE) “tender of meat.”¹⁷⁵ Chantraine sees it as related to **σώχω** or **ψόχω** “rub.”

Sqʿ “to cause to vomit” fits well with **σικχός** (4) “disgusting food.” Chantraine calls it an “expressive” term without an etymology.

Šnw is “hair” in medical texts and **šni** means “eyelashes.”¹⁷⁶ This would explain the main element in **ἐπισκόνιον** (H) “eyebrows.” Chantraine sees **σκύν-** as the theme. With an alternation of n/r, he tentatively relates it to the Old High German *skur* “shelter.”

Ψύδραξ (3) was a “pustule on the nose.” This could come either from **šdšd** or ***p3 šdšd** “protuberance on a standard.” The looseness of the phonetics is made up for by the extraordinary precision of the semantic parallel. The traditional explanation was to derive *psydrax* from *pseud-* on the grounds that lying leads to spots.¹⁷⁷ Nineteenth-century linguists preferred to link *psydrax* to a PIE root *bhes “breath” and the Germanic *blasen* “bubble” or the English “blister.” The semantics of the latter parallel are reasonable, although not as good as the Egyptian etymology. The phonetic connection is hard to detect.

Orel and Stolbova propose an Afroasiatic root ***kirVb** “breast, belly.” The Semitic **qirb** and the Egyptian **q3b** both meant “intestine.” = (F46) served both as a determinative and as a trilateral for a number of words that, with other additional determinatives, signified “fold over, double, coiled, snake, windings of a waterway.” The Coptic forms were *kōb*, qualitative *kēb*). **κόλπος** (H) meant “bosom, sinuses of the womb, fold of a garment, gulf or bay.” Chantraine derived it from a root found in the Old Norse *hualf* “vault.” **Καλ(λ)αβίς**, performed by **καλλιβάντες**, was the name of a sinuous Spartan dance. The ancient lexicographer Hesychios gave another meaning to *kallibantes* “a type of scissors [double] used for cutting eyebrows.” Chantraine has no explanation for either form.

Latin has a clear, although probably indirect borrowing from *q3b* in *colubra* or *coluber* “snake” from which, through Portuguese, comes the English “cobra.” Ernout and Meillet state that *colubra* is “without a clear

etymology.” Eric Partridge wrote that it was “probably from the Egyptian.” The phonetic correspondence between *q3b* and **κόλον** is limited. The semantic connection, however, is perfect as both mean “intestine.”

The chances that *q3b* was originally pronounced *q^wlb with a labiovelar are increased by the number of Greek words with similar semantics with a root √delph, indicating a loan of *q^wlb into Greek before the breakdown of labiovelars. These are discussed in Chapter 19.

Qrf seems to have been a “bag.” As a verb it was certainly “to contract, draw together.” In medical terminology *qrft* were “contractions” and *qrfw* were “facial wrinkles.” In Greek **γράπις** (5) means “wrinkled.” Chantraine links it to **γράφω** “write” in the sense of drawing a line. This might be plausible in the absence of the Egyptian etymology. *Qrf(w)* in the sense of “wrinkled bag or belly” also provides an etymon for **γρόμφις** (5) “old sow.” Chantraine links this to **γρύ, γρύζω** “to grunt, scold, talk in a loud voice.” There may well be confusion between the two sources here.

It has long been recognized that the Late Egyptian **qrnt** “foreskin, uncircumcised phallus” derived from the Semitic *ḡrl* “foreskin, uncircumcised phallus.”¹⁷⁸ At this point we encounter an issue of considerable sensitivity: Did this word also refer to female “circumcision” or genital mutilation? **Κρημνός** (H) means “cliff, escarpment, river banks” and “labia.” Chantraine links it to a cluster of words with different spellings around *κρεμάννυμι* “suspend, hang down.” For instance, there is *κρεμάστρα* “tail of a flower that hangs.” Chantraine rejects earlier Indo-European etymologies for *kremannumi*.

Κρήνη (H) is “fountain, spring.” Chantraine links it to **κρουνός** (H) “spring” used figuratively of “blood, lava, words etc.” He writes that both “could be” derived from a PIE root *krosno- and linked to the Germanic *hrazno “flow, water in [horizontal] movement.” Apart from the lack of evidence from Greek of a medial -s-, this seems rather different from the spring or vaginal associations of *krēmnos*, *krēnē* and *krounos*. Pausanias refers to **Κολαινίς** as an epithet of Artemis, could this refer to the wild goddess as being “uncircumcised”?¹⁷⁹ Finally, there is *κρήϊον*, an Ionian term for a kind of “bride cake.”

T3i “man, bull calf” written with a more explicitly coital determinative than **𐤕𐤓𐤕** (D53) provides a reasonable etymology for **θρόσκω** (H) “spurt out, impregnate.” Chantraine can only find one possible Indo-European cognate, the Irish *dar* “spurt out.” The Egyptian etymology seems slightly preferable in the light of two other terms: **θωρός** (5)

“semen” and **θολός** (5) “contaminated water.” For the relationship between semen and poison, see the discussion on *mtwt/mwt* above.¹⁸⁰

Orel and Stolbova present three different, but related, Afroasiatic roots: *dVhar “hunt” and *daḥar and *dr “drive away.”¹⁸¹ The Egyptian *dr* had a wide range of meanings: “subdue, destroy, remove, expel [in medical terminology].” The derivation of the Greek **δηλέομαι** (H) “wound, damage, destroy” from *dr* belongs more properly in the next chapter.¹⁸² Here, we are concerned with the meanings “remove” and “expel.” Chantraine describes **τίλλω** (H) “to pull out, pluck, mistreat” as an “isolated term without an etymology.” Having said this, he goes on to speculate that “perhaps it comes from **πίλον** ‘feather.’” I see no reason to doubt that *tillō* was influenced by this. Then there is **τίλος** (5) “diarrhoea, expelled juice.” Chantraine writes, “no Indo-European word corresponds exactly to *tilos*. He then provides a number of very distant parallels, such as the Anglo-Saxon *thīnan* “be wet.”

CONCLUSION

Most of the loans proposed here are nouns and nearly all are concrete. As I mentioned at the beginning of the chapter, I make no attempt to improve on the excellent work of Muss-Arnolt, Lewy, Levin, Brown and others regarding Semitic loans into Greek in the natural world, cooking and medicine. In general, their semantic range is similar to those from Egyptian. Nevertheless, some differences exist. As one might expect from geography, more Egyptian than Semitic words are concerned with marshes and their products. On the other hand, more Semitic loans into Greek can be found for minerals and their processing. Given the ancient reputation of Egyptian medicine, it is not surprising to find more Egyptian than Semitic medical terms in Greek. The startling number of Egyptian culinary loans can be at least partially explained by those associated with religious rituals of Egyptian origin, which tended to be more lavish than those of the Levant. In addition to this there is the fact that many culinary terms only appear in the **Δειπνοσοφισταί** “lectures on dining,” written by Athenaios who came from Naukratis in the Nile Delta.

As mentioned in the introduction, the selection of semantic fields has been arbitrary and incomplete. This chapter and Chapters 16 and 17 introduce new examples and, more importantly, show that etymologies proposed in other chapters can be clustered semantically. In this way, the individual items become more plausible. All this, of course, is subject to

the caveat that the definition of semantic fields is seldom, if ever, clear and many of the examples stray over their arbitrary boundaries.

While most of the loans, in this chapter are for material objects and processes associated with them, some have much wider religious and abstract connotations. For instance, it is startling to see *ōlenē* “matting or shelter used to bind or cover bricks” connected, through their origin from the Egyptian *wrmwt* “awnings, roofing,” to ouranos and Olympos. Similarly, the Egyptian *ʒh(t)* “inundation season, new growth” rises to *lakhainō* “to grow vegetables” and the reduplicated *ʒhʒh* to the sacred Rharian plain near Eleusis. More on such large etymological clusters from both Egyptian and Semitic will be given in the following chapters.

CHAPTER 16

SEMANTIC CLUSTERS: WARFARE, HUNTING AND SHIPPING

In the late nineteenth century, Heinrich Lewy discarded abstract and broad-ranging nouns, adjectives and verbs from his list of Semitic loans into Greek. In Chapter 7 I discussed Michel Masson's approval of this step.¹ To remedy the gap left by this self-denying ordinance, in the next two chapters, I shall concentrate on Greek borrowings from both Egyptian and Semitic in precisely the semantic fields ruled out by earlier scholars. These include weapons, warfare, hunting, shipping, society, law, politics and philosophy and religion. In this chapter I focus on the first three.

In each section, I shall separate the two source languages, and, as mentioned in the introduction, the ordering of each will follow the conventions of the two disciplines. Egyptian in the Egyptological sequence listed in earlier chapters, starting with /3/ and ending with the dentals and a final /ḏ/. With Semitic, I simply follow the order of the Hebrew (Canaanite) alphabet, with ḥ following ḫ.

WEAPONS, WARFARE AND HUNTING

Introduction

Weapons, warfare and hunting are areas of potentially great historical significance. In French, for instance, the basic vocabulary of which is

overwhelmingly Romance, but among the extremely few words of Germanic origin, one finds *canif*, “small knife”; *flèche*, “arrow”; *galant* “war-like man”: *hache*, “ax”; *hâte*, “haste, violence”; *harpon*, “grappling iron”; *heaume*, “helmet”; *hérald*, “herald”; *maréchal*, “officer in charge of horses”; *meutrir*, “murder”; and *guerre*, “war” itself. These words confirm the military nature of Frankish rule over what later became France.

On the other hand, much of the military vocabulary in English—corporal, sergeant, lieutenant, captain, major, colonel, general etc.—came from French not because of the Norman Conquest but as a result of the organizational prestige of later French armies. Thus, although the introduction of military terminology can be the result of conquest, it is not necessarily so.

In this case the number of Egyptian and Semitic terms for weapons, warfare and hunting could come from supposed Hyksos settlements and dominance in parts of Greece. They could also have been acquired by Greek-speaking mercenaries in Late Bronze Age Egypt or from encounters with Egyptian or Canaanite forces or possibly from deliberate remodeling—or at least renaming—of Hellenic social and military organization. The clearest example of this comes from Sparta and will be discussed in Chapter 21. Whatever the route by which words in these semantic areas were introduced their social and political importance gives them special significance.

Egyptian vocabulary

3bw Demotic *3b*, *i3b*, *3ibe*, *w3ibe* “brand” was written with fire  (Q7) or became “mutilate” when written with a knife  (T30) of slaves or cattle. It provides a plausible etymology for **λώβη** (H) “outrage, violence, mutilation and subject of shame, or leper.” Chantraine accepts the conventional relationship with Baltic words, a supposed labiovelar and an initial s-, such as the Lithuanian *slogà* “scourge,” etc. The semantic parallels of this connection are plausibly but the phonetics are cumbersome. Chantraine reasonably links **λώβηξ** “vulture” to *lobē*.

3bh “burn” has the extended sense of “ardor, fervor” providing a plausible etymology for the cluster around **λάβρος** (H) “violent, impetuous,” for which, apart from the parallel Latin *rabes*, neither Frisk nor Chantraine has any Indo-European explanation.

iw3 “longhorned cattle” **ἄορ** (H), *aor*—pronounced as a mono-, di- or even trisyllabic word—is normally translated as “sword.” Its meaning, however, was extended to many types of weapon or, even, equipment. The conceptual link between horns and weapons is quite tight. Take for example the French *défenses* “tusks.” Chantraine’s attempt to link *aor* to **ἄείρω** “suspend” because a sword can be suspended by a leather band is not very convincing. It may be that *aor* did not merely mean sword and may have retained an original meaning of “horn.” Its use to describe a rhinoceros’ horn is late (3CE), but **Χρυσάορος** “golden *aor*” an epithet applied to Apollo, Demeter, and Artemis is generally translated “golden sword.”² Hesiod is specific that the “golden *aor*” is a “sword” held in the hand.³ Against this interpretation is the relative lateness of swords and the fact that no iconographic evidence shows gods or goddesses with swords. They prefer more ancient bows, clubs or spears. On the other hand, many Greek divinities are represented as horned. “Golden horned” makes much more sense as a translation. Other bovine images include, most famously, **βο-ᾠπις** “cow-eyed” or “cow-faced” to express the beauty of Hera and other goddesses. Hathor the Egyptian goddess of beauty was represented as a cow. In these circumstances, despite the semantic steps required and given the perfect phonetic fit **iw3** provides a reasonable etymology for *aor*.

The derivation of **ἄλλυμι** and **οὖλος** “to destroy, destruction” from **ῥ3i** “harvest, rob, pillage” was set out in Chapter 15.⁴

Chantraine maintains that the Greek **ὀθέω** (H) “to push hard, throw, repulse, deal harm” is the iterative form of ***ἔθω**, a form constructed from **ἔθων**. The latter word occurs twice in the *Iliad* and has been interpreted as either “valor” or “following his custom.” Chantraine sees all these as derived from a root ***wedh** “shake, bump” which he thinks is found in the Sanskrit *vádhar* “weapon of Indra” or *vadar* “weapon of jet.”⁵ He admits, however, that there is no trace of an initial *w*- in *ōtheō*. It would seem simpler to derive *ōtheō* from **wđi** “throw, shoot arrow, commit offense.”

The Egyptian verb **wđ3** “to set out, proceed” has as its correlate **wđyt** “campaign expedition, journey.” With the personal suffix *-w/ eus* in Chapter 6, it provides an excellent etymology for the name of the wandering hero *par excellence* **Ὀδυσσεύς**.⁶ Frisk toys inconclusively with Anatolian origins for the name. Chantraine provides no explanation.

For Jernstedt’s proposal that a reconstructed ***p3’ḥ3wt(y)** was the origin of **φῶς, φωτός** “warrior,” see Chapter 9.⁷

P3qyt “shell of turtle, skull” provides a good etymology for **πήληξ** (H) “helmet, crest of a serpent.” Chantraine says “no etymology, possibly a loan.”

The Late Egyptian verb ***prt** “to split open, tear” appears to be a loan from Semitic. A number of Semitic trilaterals, however, are based on the Nostratic root $\sqrt{\text{pr}}$ “to split, open, give birth.” James Hoch mentions two possible sources: the first is the Akkadian *palāšu* “to dig, break through a wall,” which in Mishnaic Hebrew can mean “perforate.” Hoch is even less happy on phonetic grounds with a derivation from the Akkadian *parāšu* “to divide.” He prefers a borrowing from a root $\sqrt{\text{prt}}$ found in the Talmudic Aramaic *pərat* “to divide, crush” or in Syriac “to divide, pierce.”⁷⁸ Whatever the precise trilateral root or even source language, a Semitic or Egyptian ***prt** provides a suitable source for the Greek **πέρθω** (H) “to destroy, sack, pillage originally of towns.” Frisk and Chantraine agree that, although the word is of an Indo-European type, the etymology is “unknown.” Ancient lexicographers derived the name of the hero **Περσεύς** from *perthō* Chantraine is uncertain and considers the possibility that is pre-Hellenic.

The reduplicated **ptpt** is to “tread roads, trample, trample enemies” and “smite.” **Πατέω** (H) is “to walk, trample, crush.” Frisk sees this and the noun **πάτος** “trampled path” as deriving from a root found in **πόντος** “path.” While this etymology is quite possible, the violent Egyptian meanings seem closer to the Greek meaning.

Chantraine maintains that **μῶλος** (H) “battle, melee” comes from a sense of pain and effort. In this way he relates it to **μῶλις** (5) *molis* “pain, effort.” From here, he connects to the Old High German *muodi* “tired” and the Russian *máju* “exhaust.” Both in terms of phonetics and semantics, it would seem simpler to derive *mōlos* from the Egyptian **mry** “fighting bull” or **mrw** “bulls.” In Volume 2, I referred to the work of Alan Lloyd on the Egyptian “tauromachy” “bull fighting bull.”⁷⁹ Chantraine describes the etymology of **μῶλις** (5) as “uncertain.” **Mr** “ill, pain” or **mrt** “pains” would seem plausible for this.

Nri is “to fear” or transitively “to overawe” and **nrt**, *nure* (S) *nuri* (B) in Coptic is “vulture.” The latter provides a good semantic basis for **ἐναρα** (H) “arms taken from a beaten enemy.” Chantraine tentatively relates *enara* to the Sanskrit *sanóti* “win” *sánitar* “victor.” He does admit the difference in sense and the lack of the expected aspiration in the Greek word.

Chantraine maintains that the etymology of **νίκη** “victory” is

“unknown.” He denies Pokorny’s attempt to link it to *νεῖκος* “quarrel” because it “is not convincing in either form or sense.” The Egyptian **nḥt** “strong, victorious” *nḥtt* or *nḥtw* “victory” would seem more plausible. The possibility of a front vowel is increased by the Greek rendition of the pharaoh’s name Nḥt nb f as *Νεκτανεβο*.

A special extension of *nḥt* is *nḥt i nešte* in Coptic (although Vycichl anticipated a Bohairic form *našθe) “giant.” This provides an excellent etymon for **ναξος** an epithet for *κολοσσός*. It is interesting to note that **Νάξος** is the largest and the highest of the Cycladic islands.

The Egyptian **mn(n)wt** “fortress” probably derives from *mn* “firm, established.” It forms a plausible etymon for **ἀμύνω** (H) “to defend.” Although no form of the verb and its derivatives lacks an /n/, Chantraine sees it as merely a suffix with a basic root *ἀμν-*. He is unable to explain this assumption.

In Chapter 9, I discussed *P3 Rq̣w “enemy” as the origin of the name of the Phlegyans.¹⁰ On its own, **Rq̣w** reduplicated in Coptic (B) *luklak* “enmity opponent” provides a good etymology for **λευκός** (5) “violence, rage.” Chantraine finds none of the previous Indo-European etymologies satisfactory.

H3i has a wide range of meanings, including “descend, charge down upon, tackle, accede to office.” **ὄρνυμαι** (H) is “to dash forward, excite, give birth.” In this case, unlike that for *am̃nō* Chantraine sees the -n- as part of the root. This view is paradoxical because many verbal tenses and other derivatives of *ὄρνυμαι* lack an -n-. Chantraine has problems finding non-Greek cognates for this and with Pokorny was reduced to deriving it from a root *er.

Sft **Ξίφος** “**sword**.” In their critique of my work, Jasanoff and Nussbaum conceded that the culturally central word *xíphos* “sword” has no known Indo-European etymology and “that it is not impossible that . . . [it] has been borrowed into Greek from some other language.”¹¹ They also agreed that the idea that it comes from the Egyptian *sft*, Coptic *sēfe* “sword” is an old one, although they did not mention that it is still one maintained by modern scholars.¹² They denied this apparently plausible etymology on technical grounds set out by the Egyptologist R. H. Pierce. Pierce’s first reason for rejecting the Egyptian origin was that the Coptic form indicates that the vowel in Middle Egyptian was stressed and long, while that of *xíphos* is short.

Antonio Loprieno has illustrated the precariousness of reconstructing Middle Egyptian vocalic pronunciation; this was discussed in Chapter 8.¹³ The length of the vowel in the “pre-Coptic” reconstruction of *sft* does not provide a serious objection to the etymology.¹⁴

Rightly, Chantraine does not refer to Pierce’s argument on vowel length in his denial of the Egyptian origin. His objection is the more serious one, also taken up by Jasanoff and Nussbaum, that a Mycenaean form of *xiphos* can be found in the dual *qisipee* and that, therefore, it could not derive from *sft*. As I pointed out in Volume 2, there is a problem with interpreting this stricture too rigidly because the labiovelar indicated, **k^ws*, would be expected to breakdown to form **psiphos*.¹⁵ Szemerényi tries to explain away this anomaly by saying that it resulted from a “post-Mycenaean dissimilation of the labial element in /k^w/ caused by the following labial.” Even he admits that the one parallel he gives for this is very uncertain.¹⁶ The initial *qi* in *qisipee* may simply be a rhyming soft velar and sibilant, indicating a fricative in loaning language.

On the principle of *Wörter und Sachen*, it should be noted that considerable archaeological evidence (including that from Manfred Bietak’s excavations at Tel Ed Dab’a, the Hyksos capital of Avaris) now indicates that double-edged bronze weapons can be found from Egypt during the Second Intermediate period.¹⁷ Furthermore, the double-edged blades found in the Shaft Graves of Mycenae depict strikingly Egyptian scenes.¹⁸

Thus, there is a perfect semantic fit between *xiphos* and *sft*; a general agreement that *xiphos* is a loan; the archaeological evidence suggesting that swords came to the Aegean from the southeast.¹⁹ For these reasons, I am not the only scholar to believe that the phonetic difficulty provided by the Linear B form is far too uncertain to block the thoroughly plausible derivation of *xiphos* from *sft*. Bertrand Hemmerdinger is equally unimpressed.²⁰

The derivation of **σμήλη** “knife, chisel, surgeon’s scalpel” from **sm3** “to kill, destroy illness” was set out in Chapter 15.²¹

Vycichl is inclined to believe that the Coptic *soone*, *sone* (S) *soni* (B) “brigand” derives from **snī** Coptic *sine* “to pass, transgress” in the sense of “vagabond.” *Sine* provides a very plausible etymology for **σῖνομαι** (H) “harm, pillage, devastate.” Sinis was the famous “pine bender” whom Theseus encountered on the Corinthian isthmus.²² As befits a word beginning *si-*, “obscure” is the word Chantraine uses to describe the etymology of *sinomai*.

Sdrt “night camp, bivouac” as the origin of the Greek **στρατός** “military camp” and its many derivatives was discussed in Chapter 12.²³

Qn *kēn* in Copitic is “to complete, accomplish, perfect, finish off.” It provides a good origin for **καινός** (5) “new, of things.” Chantraine distinguishes it from **νέος**, which can mean “young” of people. On the other hand, he relates *kainos* to the Sanskrit genitive plural *kanīnnām* “of young girls.” *Kēn* in the sense of “finish off,” is also a convincing etymon for **καίνω** (5) “to kill,” for which Chantraine has no coherent explanation.

Qni means, as an adjective, “brave, strong” and, as a verb, “to conquer.” As a noun **qn** is a “brave man” or a military title. **Qnn** is “supremacy” and **qn(t)** “victory, might.” According to the ancients, **Ἀκόνιτον**, a “poisonous plant,” gained its name from being “without dust, or the sand of an arena” **κόνις** and, therefore, invincible. Modern scholars disregard this as a folk etymology. I believe that, in the sense of “without antidote,” it makes good sense. **Qn** provides a reasonable etymology for **καίνυμαι** (H) “to surpass, overcome” and for **καίνω** (5) “to kill.” Chantraine provides an explanation for neither of these.

Confusion between *konis* “sand” and *qn* “victory” is also shown in the term **βουκονιστήριον** (2CE) “arena for bull fights” (bull against bull). Chantraine is unsure that the word ever existed.

There appears to be a Nostratic root *kr found in the Altaic and Uralic *kara “black” and the Indo-European *crowos “crow.” On the basis of Egyptian and West Chadic, Orel and Stolbova reconstruct a root *qar “cloud.”²⁴ The Egyptian form is *qri* or *qrr*, Demotic *ql* ‘l, Coptic, *kloole* “cloud, storm cloud.” This origin is very probable for **κελαινός** *kerano* “black, somber,” said of blood, night or a wave in a storm. Chantraine finds parallels for the suffix -νός but admits that the radical **κελαι-** is unexplained. He also lacks an etymology for **κιλλός**, a Dorian term for “gray.” **Κηλάς** (4) is the name of “clouds that foretell wind not rain.” Finally, and this is why these etymologies have been put in this section, *qri* “storm, thunderbolt” finds a close parallel with **κῆλα** (H) “projectiles launched by the gods Apollo and Zeus.” Chantraine tentatively links it to the Sanskrit *śara* “reed, arrow” and the Middle Irish *cail* “lance,” although he admits they each have a short vowel.

The Egyptian **k3t** “vagina, vulva” sometimes written with the determinative  (D3) “braided [African] hair” provides a plausible or reasonable etymology for the Greek **κο(υ)λέον** (H) “sheath, wool, fur.”

Κολεός means “sheath” or “vagina” in Modern Greek. Frisk and Chantraine see the words as “Mediterranean.”

Kry šri is “one of the two kinds of soldiers” in the late period. Demotic *gl-šr* Coptic (L) *čalašire*. Herodotos used the word **καλασίρις** to describe members of this military caste.²⁵

The Late Egyptian **g3wt**, when written with  (V32) “wickerwork,” was “bundle.” When written with  (M3) “wood,” it was “box, chest.” These forms provide a strong etymology for **γορϣτός** (H) “container for bows and arrows.” Chantraine believes that it ought to be Scythian but, apart from the Iranian *gou* “bull,” he and Benveniste, whom he follows, have difficulty with the second half of the word. All they can find is the Old Persian *rūda*, Ossetic *rūd* “intestines!”

Through “gymnastics” we tend to associate **γυμνός** (H) with strength and endurance. In fact the original meaning was “naked, without clothes, without arms.” Nudity in sport was essential to ensure against the possibility of concealed weapons. A striking parallel to the original sense of *gymnos* is the Japanese *karate* “empty hand.” Chantraine writes about the etymology of *gymnos*: “Old term which is presented in diverse forms in the different Indo-European languages, both because of dissimilation and perhaps the result of a linguistic taboo.” He finds a collection of varied words most of them around the root found in “naked” and beginning with n-. He concludes that the initial g- is unexplained.

The Egyptian **gnn** means “weak, tender.” The phonetic parallel is considerably stronger than any Indo-European competitor, and the semantic one no worse. Tomb paintings show Egyptians practiced wrestling and other forms of unarmed combat.²⁶

Chantraine believes that **ἡγανές** and **ἡγάνεος**, which Hesychios defined as “pure youth” and “youth,” came from different sources. He derives the first from **γάννυμαι** “rejoice” and the second from an artificial combination of **ἄγα-**, an intensive prefix, and **νέος** “young.” It would seem simpler to treat them together and derive both from *gnn*.

The derivation of the name Theseus from the Egyptian *tsw* “commander, protector of the poor” was set out in Chapter 5.²⁷

The determinative  (T30) appears to be a knife made of metal. It is, however, employed for *ds*, which is both “flint” and “knife.”  is also used for **dm** “sharp, pierce” and *dmt* “knife.” This comes from an Afroasiatic root *dam also found in Central Chadic.²⁸ In Chapter 8, I referred to Hesiod’s description, in his *Theogony*, of Kronos’ castration of Ouranos suggesting that it was carried out with a sickle set with

microliths.²⁹ Some lines earlier Hesiod had been more explicit: “She [Gaia] made an element of grey flint [πολιοῦ ἀδάμαντος] and shaped a great sickle.”³⁰

Chantraine sees **αδάμας** “untamed” as the negative of δάμνημι “tame,” which belongs to the root widespread in Indo-European. In general, however, *adamas* meant “very sharp, hardest substance,” from which comes the English “diamond.” This fits an etymology from *dm* far better than from *a-* *dammēmi*. Given the Egyptian propensity for prothetic vowels the initial *alpha* does not present a serious objection.

Another plausible derivation from *dm* is **δρῦμός** (H) “sharp, piercing acid.”³¹ Chantraine has no etymology.

The Afroasiatic root *dar “drive away” is attested in both Semitic and Egyptian.³² The Egyptian **dr** has a wide range of meanings: “to subdue, expel, destroy, cast down.” Faulkner gives as a second meaning *dr* as in “lay down floors, overlay.” Interestingly, Vycichl cites *dri*, a word with this sense, written with **𓄢𓄰** (E21), the animal of Seth the god of chaos and destruction but also connected with construction.³³ This citation indicates that the second meaning derives from “level” in the sense of total destruction. In any event, *dr* provides a plausible etymology for **δηλέομαι** (H) “wound, damage, destroy.” Chantraine says “no etymology.”

Dʒt or **drt** had a wide range of meanings: “hand, trunk of elephant, handle, shaft? of a chariot.” The Coptic *tōre* (S) *tōri* (B) and *tōli* (F) extended the field still further to include “sleeve, dagger, hoe, oar.” Thus, **drt** provides a reasonable etymology for **δόλων** in its two senses, “dagger, bowsprit.” A third meaning “flying jib,” attached to the bowsprit, may have been influenced by another Egyptian term **dʒw** “mat?” Chantraine points out that, although *dolōn* only appears as a word in 2CE, it must be older since a personal name **Δολων** is attested earlier. He does not suggest any Indo-European etymology.

Dʒyw “opponent” and **dʒyt** “wrongdoing” appear to derive from **dʒi** “cross over water,” in the sense of “transgress.” They provide a good etymology for **δήιος** (H) **δαῖιος** (5) as an adjective describing an enemy: “hostile, destructive, savage conduct.” *Daïos* also has connotations of “burning.” The nineteenth-century scholar W. Schulze argued that two different roots were involved.³⁴ Chantraine is not sure but is clear that the words have been influenced by **δαίω** (H) “burn.” Enmity and burning are conceptually easy to confuse. *Daïō* has a plausible etymology in the Egyptian **dʒf** Coptic *jouf* (SB) or qualitative *jou* (B) “burn.” Chantraine rejects the conventional link to the Sanskrit *dunōti* “burn.”

Another cluster of words related to *dʒi* are those around *dʒis* “dispute, argument, civil war.” These provide a possible etymology for **δῆρις** (H) “war” and in at least one case, “competition within the family.”³⁵ The difficulty with deriving the Greek word from *dʒis* is that in Homer it only appears in the accusative **δῆριν**. Chantraine derives *dēris* from an Indo-European root found in the Sanskrit -dari- “who separates.” Nevertheless, the Egyptian etymology from *dʒis* with its strong semantic parallels should not be discarded.

With the nominal suffix -w, *dʒisw* meant “disputant.” This could well be the origin of the first element of **Θερσίτης** who challenged the chiefs at the siege of Troy and was put down so brutally by Odysseus.³⁶ Given the context, the etymology is certainly better than devised by Robert Graves: “son of courage.”

In Egyptian **dʒmw** were “young men, troops.” This provides a reasonable etymology for **τόλμη** (6) “brave, audacious.” Chantraine reports on previous structural analyses of the word. Neither he nor any of his predecessors can find any Indo-European cognates.

Semitic vocabulary

In Semitic a number of onomatopoeic words exist based on the roots √lh and √hll with a basic sense of “cry aloud, ululate” or in European languages *alleluia*. In Hebrew *ʾālāh* can mean “curse, wail.” The Akkadian *alālu* and the Arabic *hal* mean “shout in joy” though the latter may also be “cry in terror.” The Greek **ἀλαλά** (6) is “violent cry” particularly “war cry,” sometimes also of anguish. Jane Harrison argued that such cries are “beyond articulate speech.”³⁷ Chantraine agrees that it may well be the case not only for *alala* and what seems to be a derivative **ἀλάλνυξ** “sob, cry” but also for **ὀλολύζω** (H) and **ἐλελεῦ** (5). The pattern V¹l V¹IV¹ is undoubtedly widespread; Chantraine has found a parallel for *alala* in Sanskrit. Nevertheless, it is not universal and borrowing into Greek from Semitic here cannot be ruled out.

The Semitic name, **Aramu**, in Akkadian and *ʾĀrām* in Hebrew may well be the origin of the Egyptian *ʿ3m* “Asiatic.”³⁸ It referred to the land, much of it desert in what are now northern Iraq and Syria as well as to its people *ʾĀrāmî*. In Greek, **ἐρήμιος** (H) “solitary, of peoples and places, desert.” Chantraine’s comment on the etymology is “nothing clear.”

Chantraine explains **ἐνοπή** (H) “cry of warriors,” later “combat.” as coming from **ἐν-φοπ-ή* from a root **wek^w* related to **ἔπος** “word.” It would

seem simpler to derive it from the Semitic $\sqrt{>np}$ “be angry” Arabic $>anifa$ and the Hebrew infinitive construct $>\check{e}nop$.

Oswald Szemerényi has proposed that the Greek $\acute{\alpha}\pi\eta\nu\eta$ (H) “four-wheeled cart” derived from a West Semitic form found in the Ugaritic $>apnm$ “two-wheeled cart.”³⁹ This seems very likely. He also sees another derivation of the same root as the origin of $\lambda\alpha\mu\pi\acute{\eta}\nu\eta$ (5) “covered wagon or chariot.” This derivation requires hypothesizing a form with the common preformative $m-$ $*m>apn$ and from $*mappen > *nappen > *nampen$ to $*lampen$.⁴⁰ Although clumsy, this is still possible. Chantraine recognizes the similarity between $ap\bar{e}n\bar{e}$ and $lamp\bar{e}n\bar{e}$ but cannot explain either.

The basic meaning of $\sqrt{>pn}$ appears to be “wheel, turn,” a good etymology for $\pi\acute{\eta}\nu\eta$ (H) “bobbin, spool.” Chantraine rejects previous attempts to attach it to an Indo-European root. He attaches it to $\pi\eta\nu\acute{\eta}\kappa\eta$ (H) “a kind of wig.” The connection between wigs and spinning is common in many cultures: Sir Toby Belch described the hair of his friend Sir Andrew Aguecheek: “it hangs like flax on a distaff.”⁴¹

The Afroasiatic root $*>arVh$ signifies a “kind of cattle.”⁴² In Ugaritic $>arh$ and in Akkadian $arhu$ mean “wild cow, heifer.” This is linked to the Akkadian $>ar\acute{a}hu$ “be quick, hasten,” and $erehu$ “advance.” The Canaanite verb $>rh$ in the Hebrew root $>\acute{a}rah$ “wander, journey go,” imperfect $y\check{e}^{\check{e}}roh$.⁴³ A West Semitic member of this cluster seems an obvious source of the Greek $\xi\rho\chi\omicron\mu\alpha\iota$ (H) “to come, go, march.”⁴⁴ The verb is odd in that it only possessed a present theme where it replaced the Indo-European $\epsilon\acute{\iota}\mu\iota$. This fact in itself suggests a loan. Chantraine considers some Indo-European etymologies for $erkhomai$ but states “no assured etymology.”

Another plausible loan from $\sqrt{>rh}$ is the extraordinarily productive stem $\alpha\rho\chi-$ $\acute{\alpha}\rho\chi\omega$ (H) “to march in front, be the first, begin.” From this $\acute{\alpha}\rho\chi$ developed the meanings of “chief, commander” and $\acute{\alpha}\rho\chi$ $\alpha\acute{\iota}\omicron\varsigma$ became “ancient, original.” These fruitful semantic extensions appear to have taken place within Greek. Nevertheless, the original source of $\acute{\alpha}\rho\chi-$ seems to have been the African heifer. Chantraine contents himself with denouncing the “valueless hypotheses” of Boisacq and Schwyzler. He makes no positive suggestions.

The pan-Semitic root $\sqrt{>rk}$ is found in the Akkadian $ar\acute{a}ku$, the Ugaritic $>ark$ or $>urk$ and the South Arabian $>rk$ and the Hebrew $>\acute{a}rak$ or $>\acute{a}r\acute{e}k$. It means “long” and almost always applies to time: “to last, survive, endure.”⁴⁵ The basic senses of the Greek $\acute{\alpha}\rho\kappa\acute{\epsilon}\omega$ are “to protect and suf-

fice.” But also, at least among the tragedians, *arkeō* was also used to convey “holding out, enduring.” Could this have been the earlier meaning? Chantraine associates *arkeō* with the Latin *arx*, “acropolis” and *arceō* “contain, maintain.” Ernout and Meillet believe that *arx* might well be a loan word. Even so, they follow Pokorny in seeing *arceō* as belonging to an Indo-European family exemplified in the Armenian *argel* “prevention.” Chantraine is skeptical of this. Thus, a Semitic etymology from *->rk* remains a reasonable possibility.

In Arabic the root $\sqrt{>rt}$ is found in $>rt$ “to sow dissension” $>irt$ “ashes” and $>aratta$ “to light a fire, provoke war.” In the Eritrean language of Tigre $>arta$ is to “be excited.” There are also other versions, for example, with /š/ such as $>araša$ “to stir up a fire, sow discord” and $>arš$ “indemnity, money for the shedding of blood.” These were possibly borrowed from Canaanite and /t/ shifted to /š/.⁴⁶ Such a Canaanite form would provide a good origin for **ἔρις** (H) “quarrel, rivalry, ardor in combat.” Frisk refers to previous hypotheses as “very questionable.” Chantraine simply states “no etymology.”

Orel and Stolbova, propose a root *bel “weapon” for Afroasiatic but they do not include a Semitic form.⁴⁷ In 1967 Maria Luisa Mayer claimed that the Greek **βέλος** (H) “missile, projectile” derived from the Neo-Assyrian and Babylonian Akkadian **belu** “weapon.”⁴⁸ Chantraine, on the other hand, subsumes *belos* under **βάλλω** “to throw, place.” The existence of an Arcadian form **δέλλω** leads him to propose an original form *g^welə with a labiovelar. He relates this to the Avestan *ni-yrā-ire* “they are beaten,” Tocharian *klā-* “fall.” These are not very impressive. On the other hand, *belos* fits well with *ballō* and *belu*. It is unlikely to have originated the whole Greek cluster. Thus the parallel could either be a random coincidence or the result of a convergence from the two sources.

The etymology of **βάρις** “estate, great and fortified house” from the Egyptian *pr* with the same meanings was discussed in Chapter 9.⁴⁹ In Gesenius’s dictionary the late Hebrew word *birāh* “castle, palace” and the Akkadian *birtu* “fortress” are supposed to be borrowings from Indo-European, the Iranian *bāru* and the Sanskrit *bura* or *bari*. Ellenbogen denies this.⁵⁰ **Βύρσα**, although best known as a place-name for the citadel of Carthage was, as Muss-Arnolt pointed out, also used in Athens.⁵¹ The legend of Dido’s using strips of ox hide, *byrsa*, to claim more territory is clearly a folk etymology to explain a foreign, almost certainly Canaanite, word. Despite the difficulty in explaining the final -sa, this is likely to be related to *birāh* or *birtu*.

Afroasiatic contains a root *gabar “male.”⁵² The Hebrew segolate *geber* comes from a general Semitic *gabr. Its meaning was extended to convey “strong, mighty.” The Akkadian *gabru* meant “rival.” In Arabic *jabbār* was “giant, colossus, almighty.” The Hebrew verb *gābar* is “to be strong or mighty” and the noun *gibôr* is “a strong and valiant man.” Despite the pattern that most specifically Spartan terms derive from Egyptian, not Semitic, whatever the vocalization, the root √gbr provides a reasonable etymology for the Laconian term **καββαλικός** “fighter.” Chantraine derives this from a hypothetical *καταβαλικός “able to throw to the ground.” This is possible but unlikely.

The root √gdl “great” appears in Arabic, Aramaic and Hebrew. With the nominal preformative m-, **migdāl** is “tower.” The Greek **μᾰγδωλος** (3) is “guard tower.” Chantraine and other lexicographers agree that this derives from Semitic.

Oswald Szemerényi points out that the Hebrew **gālōm** “wrapping garment” provides a good etymology for the Greek **χλαμύς** (6) “coat, especially military.”⁵³ Chantraine describes this hypothesis as “fragile,” while admitting that *khlamys* and similar words are of “unknown origin.”

The Canaanite *zāram* is “to pour forth in floods” and *zerem* < *zarm was a mountain rainstorm dashing against a wall. In Akkadian *zarāmu* was “overwhelm.” This Semitic source explains the main element in **ἐπιζαρέω** (5) “to attack, swoop down on.” Chantraine rejects a previous attempt to find an Indo-European etymology, concluding simply “unknown.”

The well-known Arabic *hajj* is a “sacred journey, pilgrimage,” and the Sabaeen *hgg* is a verb “to make a pilgrimage.” The Sabaeen *hg* was “pilgrimage.” The Hebrew *hag* is a “festival, pilgrim feast.” The root *hjj* in Arabic has another aspect: “to defeat, overcome, convince or be a competent authority.” This meaning may explain a Hebrew form *hāggā* > found in the Book of Isaiah in which “the land of Judah will be to Egypt as a *hāggā* >.”⁵⁴ The Authorized Version translates it as a “reeling” and the New English Bible as a “terror.” Could it possibly be as a “leader”? The Greek **ἡγεομαι** (H), from which *ἡγεμών*, is “to march in front, guide, lead.” Ernout and Meillet relate *hēgeomai* to a root *sāg or *sæg found in the Latin *sagio* “to know the future,” the Hittite *šakiya* “to show the signs” and the Irish *saigim* “to seek, search.” These clearly form an Indo-European word family but does *hēgeomai* belong to it? Neither the Indo-European nor the Semitic candidate is semantically strong, but the latter remains a strong possibility.

The etymology of **αἷμα** (H) “blood, spirit, courage,” from the

Canaanite **ḥayyîm** “life [with connotations of blood]” was discussed in Chapter 14.⁵⁵

In Arabic *hamā* or *hamy* means “to protect, guard.” In Akkadian *emu* meant “to surround, guard.” In Ugaritic *ḥmy*, *ḥmt* and in the Phoenician plural *ḥmyt*, all signified “wall.” The Hebrew **ḥōmāh** is “wall as protection.” The Greek **αἰμασία** (H) meant “enclosure, dry stone, brick wall.” Chantraine writes, “It would be surprising if a word of this type had a certain Indo-European etymology.”

While the usual way in which a Semitic or Egyptian /ḥ/ was rendered in Greek was as /h/, it could also come out as /kh/. Thus it is not surprising to find a noun **χώμα** (5) “dune, terrace, dike” and the verb **χώννυμι** (5) “pile up, terrace.” Chantraine has no coherent etymology for this word.⁵⁶

The root **ḥnh** is “to bend down, encamp” and the common place-name **Mḥnm** in Ugaritic and **Maḥānayîm** in Hebrew means “two camps.” In Volume 1 and elsewhere, I have discussed the derivation of the name **Μυκῆναι** from this root.⁵⁷

Karl Brugmann argued that when the breathing was on the initial—as in **οἷστός** (H) “arrow”—oi- was not a diphthong but a prefixed o- (which he did not explain). He, therefore, related it to the Sanskrit *iṣyati*, “set in motion” and the Greek **ῥός** “arrow.”⁵⁸ His case is somewhat weakened by the fact that in Attic Greek the accentuation was **οἷστός**. In contrast to Brugmann, as indicated in earlier chapters, I am inclined to see -oi- in Greek as an indication of a borrowing from a word containing a rounded consonant C^w.⁵⁹ In this case, it is likely that the Arabic *ḥazwa* “small arrow,” the Ugaritic *ḥz* and the Hebrew *ḥēsi* or *ḥis* “arrow” derive from an earlier *ḥ^weṣ or *ḥ^weṣ. This hypothesis is strengthened by the Akkadian form *uṣṣu*. Paul Lagarde proposed deriving *oistos* from *ḥis*, but Lewy rejected this proposal on the grounds later taken up by Brugmann.⁶⁰ Chantraine does not challenge Brugmann but concludes the section on *oistos*: “it could also be an arrangement of a loanword.”

The complications of this etymology are compounded not only by the presence of *ios* “arrow” but also by **οἷστρος** (H) “goad, prick, sting.” Chantraine compares it to the Lithuanian *aistrà* “violent passion.” The striking similarity of phonetics and semantics makes it simpler to relate it to *oistos*. Another word that is almost certainly related is **αἶσσω** (H) “shoot, dart.” Chantraine describes this etymology as “uncertain.” He rejects on both phonetic and semantic grounds any connection to the Sanskrit *veṣjāte* “to withdraw” and for phonetic reasons, although the

semantic parallels are good, connections with αἰολος “lively, rapid” said of wasps and horseflies. To conclude it seems reasonable to cluster *oistos*, *oistros* and *aissō* and to derive them all from *h^Weṣ.

Objections to the derivation of the Greek ἄρπη from the Semitic root √h^Wrb “sword” were discussed in Chapter 8.⁶¹ Although Orel and Stolbova did not mention it as an Afroasiatic root, Egyptian and Semitic clearly shared a root √h/ḥrb for the fundamental tool in harvesting: the sickle. The natural predecessor of this implement was the animal jawbone, and a survival can be seen in the doubled determinative  (F19) used for the Egyptian *ḥ3bb* or *ḥ3bb* “crookedness,” a word clearly related to *ḥ3b* “sickle.”⁶² The relationship between harvesting and slaughtering enemies is obvious in many cultures, from Samson’s boast “with a jawbone of an ass I have slain a thousand men” to Cromwell’s “God made them as stubble to our swords.”⁶³ Thus, it is not surprising to find the Semitic root √h^Wrb “sword” and the Hebrew verb *ḥārab* “to attack, smite down” also found in the Arabic *ḥaraba*. This may well have been confused with √h^Wrb < √h^Wrb, and the verb *ḥārēb* Arabic *ḥariba* Akkadian *ḥarābu* “dry, waste, laid waste.” These two sources combined in the Canaanite √h^Wrb provide a plausible etymology for ἄρπάξω (H) “to plunder, attack, rape.”

In 1981 Oswald Szemerényi proposed that the Greek ῥομφαία (3) “large sword” also derives from this root.⁶⁴ Chantraine sees parallels for the ending -aia but thinks that this word, too, could be a borrowing.

I have discussed the derivation of the Greek ἄρμα (H) “chariot” from the Semitic root √h^Wrm elsewhere.⁶⁵ In addition, this was mentioned in Chapter 3 and I shall return to it in Chapter 21.⁶⁶

In the *hiphal*, a causative verb type, the root √t^Wwl is “to cast down.” In its passive counterpart the *hophal* is “to be cast down, overwhelmed.” With a final -m Hebrew and Aramaic √t^Wlm (< √z^Wlm as in Arabic?) and Ge’ez √t^Wlm all mean “to oppress, injure.” Chantraine has no etymology for θλάω (H) “to murder, crush.” An origin from √t^Wlm is quite probable. The disappearance of the final -m can be explained as its having been interpreted as morphologically from the infinitive *thlān* or the first person plural *thlaomen*. Directly or indirectly √t^Wlm may also be the etymon of θλῖβω (H) “to oppress, overcome.” Chantraine sees it as a cross between *thlaō* φλῖβω “to crush, oppress.” There is, indeed, a striking similarity in both sound and meaning between the two verbs, which indicates some connection. The direction of influence is, however, less easy to determine. *Phlibō* has no clear Indo-European etymology and could have been formed by analogy with *thlibō*.

In Chapter 4, I noted Gamkredlidze and Ivanov's proposal that the PIE $*k^{[h]_r}(e)i$ "to buy, trade, barter" derived from Semitic. More specific borrowings also appear to have come from West Semitic into Greek. The Hebrew *kārāh* "to get by trade, trade" and the Arabic *kariya* "to let out, hire" provide good etymologies for the root of **ἐπίκουρος** (4) "auxiliary mercenary" and **καρόω** (6CE) in the sense of "to buy, bargain." The more common meaning of **καρόω** (4) "to be drunk out of one's mind," appears to derive from *kārāh* "to give a feast." None of the Greek words has an Indo-European etymology.

While Orel and Stolbova do not list it as an Afroasiatic root, the biliteral $\sqrt{mh}$ "confront, fight" is widespread in both Semitic and Egyptian. In Chapter 8 I mentioned the derivation of **μόχλος** "lever" from the Egyptian *mḥ3t* "balance."⁶⁷ *Mḥ3t* itself came from *mḥ3* "to match, equal, be like." The Canaanite $\sqrt{mhr} < mḥr$, as in the Akkadian *māḥāru*, means "in front of." I proposed this as the etymon for **μέχρι** (H) "upto" in Volume 1.⁶⁸ The Hebrew *māḥāz* is "to clap hands." Other derivations of *mḥ* are more confrontational: *māḥāh* "to strike, wipe out," the Akkadian *maḥu* "to crush, oppress," *māḥāsū* "to smite through, wound, shatter." Finally, there is *māḥaq* "to destroy utterly, annihilate."

Μάχομαι (H) "combat, battle" has no established Indo-European etymology. Chantraine is skeptical of connections with a hypothetical Iranian $*ha-mazan$ "warrior" reconstructed from **Ἀμαζών** or with **μάχαιρα** "dagger." The relationship between the Hebrew *māḥarāh* "weapon" and *makhaira* was discussed in Chapter 7.⁶⁹ All in all, there seems no reason to doubt a Semitic origin for *makhomai*.

The root $\sqrt{mrd}$ "rebel" is widespread among Semitic languages. The Arabic *marada* is "bold and audacious rebellion" but *mard* is an apostate from Islam. In Hebrew *mārad* is "to rebel" against God or a king, and *mered* is "rebellion." The Greek **ἀμέρδω** (H) was "to deprive" notably of what is legitimate. It has no assured Indo-European etymology. Thus, despite the difficulty of the prothetic *alpha* the Semitic origin is clear.⁷⁰

The Arabic *naky* is "to be defeated" *nika'ya* is "inflicting of injury." In Hebrew $\hat{n}ākāh$ is "to smite" in the passive or niph'al perfect it is *nikkāh*. Chantraine considers the etymology of **νεῖκος** (H) "dispute, battle" uncertain. He is skeptical of attempts to link it to the Latvian *nikns* "bad, violent" and of Pokorný's linking it to **νίκη** (H) "victory."⁷¹ Despite both semantic and phonetic imprecisions and difficulties in the absence of Indo-European competition a derivation of *neikos* from Semitic seems quite possible.

The Semitic root $\sqrt{<zz}$ occurs in many languages: Arabic ‘azza and ‘izza “to be strong powerful”; Akkadian *ezezu*, *ezzu* “fierce, furious”; the Ugaritic and Phoenician ‘z and the Hebrew ‘āzaz , ‘az , ‘oz ‘ēzuz all meaning “strong, fierce.” These provide an excellent etymology for the Homeric αἰζήος “vigor, physical strength and courage, in a hunter or warrior.” Chantraine states that the origin of the word is unknown.

Orel and Stolbova find a Proto-Afroasiatic root *pal “cut, split.”⁷² The -pl- in “split, divide” has cognates in both Arabic and Aramaic. In Ge’ez *fälägi* is “ravine, stream” and the Akkadian *palgu* is “canal.” Bomhard constructs $\text{*p}^{[h]}il\text{y}$ - $\text{*p}^{[h]}e\text{y}$ for Nostratic.⁷³ The lateral fricative /l/ and its ramifications as /s/ or /l/ were discussed in Chapter 13, and evidence from both Semitic and Egyptian suggest that the original form was *pal .⁷⁴

In Arabic, *fala* and in Hebrew *pālāh* are “to be separated, distinct.” In both language families additions were made to the biliteral *pl . Hebrew *pālāh*, Arabic *falaḥa* are “to cleave.” One such extension of $\sqrt{plq}$ was discussed in Chapter 4 when I considered the loan of a Semitic form found in the Akkadian *pilaqu* “ax” into PIE.⁷⁵

The extension considered here is $\sqrt{plg}$. The Hebrew *pālag* “split divide” has cognates in both Arabic and Aramaic. In Ge’ez *fälägi* is “ravine, stream” and the Akkadian *palgu* is “canal.” In Chapter 8, I suggested that the Egyptian *t33* “boundary, canal” should be seen as the etymon of *thalassa* “sea.”⁷⁶ Here, I accept the proposal of Muss-Arnolt that a vocalization of $\sqrt{plg}$ was the origin of the πέλαγος (H) the next most frequently used Greek term for “sea.” Chantraine considers linking *pelagos* to πλάγιος “oblique” and, hence, to the Latin *plāga* “wide space.” but he, Ernout and Meillet are all skeptical of the connection. The best Chantraine can come up with is a hypothetical root $\text{*p}^0l\text{ə}$ “flat, space.”

Many scholars have studied, and speculated on, the obvious relationship between the Hebrew *pīlegeš* and Greek παλλακή or παλλακίς (H) both meaning “concubine.”⁷⁷ Chaim Rabin saw it as an Indo-European loan into Hebrew.⁷⁸ John Pairman Brown sees it as from Anatolia, Hittite or Luvian.⁷⁹ Saul Levin demonstrated that it could not regularly be Greek and speculated that it came from the Indo-European Messapic language of Apulia and Albania (about which very little is known) and, further, that it passed through some “unknown non-Indo-European language of the Aegean” before arriving in both Greek and Hebrew.⁸⁰ The Hebrew phonetics are undoubtedly irregular and this may reflect borrowing to and from another language. Nevertheless, the

structure p-l-g and the sense of the concubine as someone “cut off” or “apart” fit very well with the cluster around the biliteral $\sqrt{pl}$.

In Egyptian *png* < *plg, Coptic *pōlč* (S) and *phōlč* (B) when written with the determinatives  (T30) and  (D40) (“strong arm”) meant “to separate, decide, liberate, terminate and die.” They all suggest “cutting with a knife.”⁸¹

The other reflex of $\sqrt{plg}$ is $\sqrt{psg}$. In Egyptian *psš* is “to divide, division.”⁸² *Pšn* was “to split, separate.” In the Bible *pāsag* is “to pass between.” In later Hebrew it is used in the sense of “to split, cut off.” The antiquity of this meaning is confirmed by the place-name Pisgāh, a mountain whose striking natural feature is a cleft. The Greek **φάσγανον** (M) “sword” almost certainly belongs to this cluster with an original sense of “cleaver.”⁸³ Chantraine points out the suffix -ανον is used for instruments. He rejects an origin from **σφάζω** “to cut the throat of” and cognicity with the Sanskrit *khadga* “sword.”⁸⁴ He is left with the hypothesis of borrowing and refers to the proposal of Umberto Rapallo who saw it as coming from the Semitic $\sqrt{psg}$.⁸⁵ Rapallo maintained that $\sqrt{psg}$ derived from a root $\sqrt{ptg}$ attested in Aramaic and Arabic. This would have led to a Canaanite ** $\sqrt{pšg}$. The difficulty with this is not that such a form is not attested (there is none for $\sqrt{pšg}$ either) as much as that /š/ did not merge with /s/ but /ś/ did. While in Phoenician /ś/ merged with /š/, in Hebrew the merge was with /s/. See for instance the biblical *pāśāh* “spread” and the later form *pāśāh*, as well as *pāśaq*, “open wide” and the later *pāsaq* “to cut, sever, cleave.” Thus, while it is clear that *phasganon* derived from $\sqrt{psg}$, it is extremely likely that $\sqrt{psg}$ itself was originally * $\sqrt{pšg}$ and ultimately $\sqrt{ptg}$.

Καναδόκα is a Laconian name for the “notches in an arrow.” Chantraine derives the first part from **κάννα** “reed.” For the Semitic origin of this, see Chapter 17.⁸⁶

In 1928 Heinrich Lewy proposed that the Homeric hapax **καταίτις** “leather helmet with no crest or plumes” could be derived from the Semitic root $\sqrt{qtt}$.⁸⁷ The Arabic *qatt* is “to cut, cut off, pare, trim.” and the Hebrew *qot* is assumed to be related to it. Chantraine seriously considers this possibility.

There is an obscure cluster of Greek words: **κοσύμβη** “shepherd’s coat,” **κοσσύμβη** “hair net,” **κότθυβος** “element of military equipment.” Chantraine writes of the first two that they give the impression of a fringe or a coat with a fringe. The medial consonants suggest

uncertain borrowings from a Semitic *tsade* /š/. Indeed a root is found in Arabic, Aramaic and New Hebrew $\sqrt{qsb}$ “to cut off, shear [shorn sheep].” In Late Hebrew one finds the expression *qīṣbê ḥārīm*. The meaning of *qīṣbê* has been translated variously as “extremities, bottoms, troughs, roots” of mountains.⁸⁸ Given the association of the root $\sqrt{qsb}$ with “shearing,” “fringes of the mountains,” seems a better translation. Thus a passive participle *qāṣub would provide a plausible origin for the three Greek words Chantraine sees as “without etymology.”

The common Semitic root $\sqrt{r>s}$ “head, chief” occurs in Arabic as *raʿs*, in Akkadian as *rēsu*, Ugaritic as *rʾis*, in Hebrew as *roʾš* and Western Phoenician or Punic as *rus*. The meaning of the Greek word ῥησός (5) is uncertain. The consensus, however, is that it is that of ἄρχος “leader.” In that case it would be an old loan introduced from the archaic *raʿs* and going through the sound shift *ā > ē*.

The Canaanite $\sqrt{sbk}$ was to “interweave” and ἑθβάκᾱ “lattice work, network” In Greek σαμβύκη (4) was (1) a triangular harp with four strings and (2) a siege engine, presumably with a similar shape. Given the initial s- and the many Greek names for musical instruments with Semitic etymologies, Chantraine sees it as a “certain” oriental borrowing, but he refers to E. Masson’s niggling objections to the previous Semitic etymologies.⁸⁹

In Chapter 13 I discussed the Semitic etymologies of the cluster with such words as συλάω and σκύλα “to despoil, strip, plunder.”⁹⁰

Conclusion

In 1970, the Italian scholar Umberto Rapallo stated, “None of the names by which Homer designates a ‘sword,’ φάσγανον, ξίφος, ἄορ, μάχαιρα have secure connections with other Indo-European languages.”⁹¹ He wrote this having made a strong case for a Semitic origin for *phasganon* and an approving reference to the conventional Egyptian etymology for *xiphos*. *Aor* too has a possible Egyptian derivation.⁹² The complications with *makhaira* and its ultimately Egyptian origin are discussed in Chapter 7.⁹³ Thus the Homeric terminology of the sword is not merely non-Indo-European but very largely, if not exclusively, Afroasiatic. The same may well be true of *harpē* “sickle and scimitar” found in Hesiod.⁹⁴ This is significant because the sword was a new “wonder weapon” of the Late Bronze Age. While earlier heroes like Herakles wielded a club, those who came later, notably Theseus, made great play of gaining and using

a sword against enemies who lacked one.⁹⁵ These legends are represented pictorially by a Pylos mural of men wearing kilts, greaves and Mycenaean helmets, carrying swords and attacking people who are dressed in skins and nearly all unarmed.⁹⁶

The terminology of the chariot, the other wonder weapon of the Late Bronze Age, has fewer clearly Afroasiatic elements. The possibility that *harma* “chariot” derives from Semitic or Egyptian will be discussed in Chapter 21.⁹⁷ I treated the derivation *heteros*, associated with the two men in the chariot, from the Egyptian *htr* in Chapter 12.⁹⁸ The origin of other terminology regarding horses and chariots is less clear-cut. It may well be that the development of chariots in north Syria by an Indo-Aryan-speaking warrior class has left traces in Greek.⁹⁹

The most important single military stem in Greek is *stratos* “camp” with its many ramifications; it clearly derives from the Egyptian *sdrt*.¹⁰⁰ The developments of *erkhomai* “march” and *arkhō* “head a march” from the root $\sqrt{>rh}$ provide just two of the many important Semitic influences on the Greek military vocabulary.

At the beginning of this chapter I discussed what I saw as the two major modes by which military language can be transmitted. The first was through conquest and the second was through reputation for superior military technology or organization. The saturation of Greek by Egyptian and West Semitic in this semantic area does not require the first mode, though it certainly allows for it. It does, however, necessitate the second and this should not surprise us, given what we know, through documents and archaeology of the Second Millennium BCE, about the relative development of wealth, power and material culture in Syria and Egypt as opposed to the Aegean.

SHIPPING

In Volume 2 I referred to the balance of wealth shifting from the large wheat-growing plains of northern Greece to the coasts and islands of the south and east. This change took place during the Neolithic in the Fifth or Fourth Millennia BCE.¹⁰¹ Since then Greek civilization has been closely connected to, and dependent on, the sea. One would expect, therefore, a large and sensitively mapped vocabulary in this semantic region. Take, for example, the many Greek words for “sea”: *θάλασσα*, *πέλαγος*, *πόντος*, *Ωκεανός* and *ἄλς*. Arguments that *thalassa* and *pelagos* derive respectively from Egyptian and Semitic words for canal have

already been given in this volume.¹⁰² For peoples linked by the water the image of the sea as a barrier is somewhat paradoxical but the idea becomes evident in the plausible derivation of ἰσθμός (H) “isthmus, neck” from **sdmi** “attachment.”¹⁰³

In Volume 2, I proposed that *pontos* derived from the Egyptian Pwnt “distant land to the north and south and the sea to be crossed to reach it.”¹⁰⁴ In the same volume, I considered Michael Astour’s suggestion that Ōkeanos was constructed from the Sumerian **A ki an* “water of land and heaven.”¹⁰⁵ The only synonym with a clear Indo-European etymology is *hals* from the root **sal* “salty.” Greek, like Armenian and Indo-Aryan, lacks the root **mar/mor* “sea, stretch of water” found in Latin, Celtic, Germanic and Balto-Slav. Altogether, it is striking that both the richness of the Greek vocabulary of the sea and the most frequently used terms for it can be plausibly derived from Afroasiatic.

The number of Greek navigational terms with plausible Afroasiatic origins is also impressive. I shall begin with the Egyptian proposals.

Egyptian vocabulary

Černý and Vycíhl agree on a sequence from **bny**t “lower millstone” through **ebn̄tyet* > **ewn̄tyet* to the Coptic *euni*. From this they derive the Greek εὕνη (H) “bed” but also “stone, anchor” a large stone with a hole through which it can be attached to a ship.

The young Adolph Erman allowed only one exception to his blanket denial of Egyptian loan words in Greek: the derivation of βάρις (5) “flat-bottomed ship used in Egypt” from the Late Egyptian and Ugaritic **br** “coaster, ship” *baare* in Coptic.¹⁰⁶ No subsequent scholar has challenged this.

The derivation of πρύμνη (H) “poop” from ***p3 rmn** was discussed in Chapter 9.¹⁰⁷

Sdmi, the causative of *dmi* “to be joined” as “attachment” has been mentioned above in connection to *isthmus*. In addition, ***p3 sdmi** “the attachment” makes a plausible etymon for πείσμα (H) “maritime cord, cordage” and πεισιμάτιον “umbilical cord.” Chantraine confidently reconstructs a form **πενθσμα* that he links to the Sanskrit *badhnāmi*, Gothic *bindan*. This stretch is made even less plausible by the incongruity of the initial labials.

Πτακάννα (2CE) was “a mat used on boats.” Pollux the Sophist from Naukratis wrote that it was the same as κάννα “reed.”¹⁰⁸ Even E. Masson

accepts that *kanna* derives from a Canaanite *qāneh* “reed.” Two steps are needed to accept a derivation from *p³ knh: first that *qāneh* was adopted from Semitic into Egyptian, and second that one can ignore the frequent alternation between initial p- and pt- in Greek. Neither of these barriers seem very substantial.

In modern Egyptian Arabic *rūmis* is “a raft made of jars.” It comes from the Coptic *rams* and the Demotic **rms**. Jaroslav Černý maintained that this form derived from the Greek **ῥωψ**, **ῥωμσιν**. All other scholars reverse the direction.¹⁰⁹

The Egyptian **hʿw** has a wide range of meanings: “weapons, furniture, ship’s tackle, utensils.” In Late Egyptian the field even included “basket, bucket.” The semantics of the Greek **σκεῦδος** (5) are remarkably close: “recepticle, utensil.” In the plural **σκεῦδη** is “utensils, of all sorts: for the house, culture, baggage, equipment and navigation.” For correspondences of Egyptian /h/ with Greek /sk/, see Chapter 8.¹¹⁰ Chantraine denies all previous attempts and simply states that *skeuos* is without an etymology.

The derivation of **σοῦσον** “ropes, cordage” from **sšnw** “ropes, cordage” was discussed in the last chapter.¹¹¹

In 1955 Cyrus Gordon proposed the Egyptian **sqtt/w** a “kind of boat” as the origin of **ἄκατος** a “rapid light boat.” Szemerényi came to the same conclusion almost twenty years later.¹¹² Chantraine speculates that it might be a loan.

Šdw “rafts” provides a good etymology for **σχεδία** (H) “raft.” Chantraine associates it with the all-purpose **ἔσχον** “I held.”

Ἰκρια (H) “scaffolding on fore and aft decks” and **κάλον** “inferior boat” in the Laconian dialect can both be plausibly derived from **kʒi** “boat of Nubian type?”

The derivation of **τοπεῖα** (3) “cordage” from **tpt** “cord, thread” will be discussed in Chapter 17.¹¹³

Τράμπις (3) “barbarian boat” would seem to derive from the Egyptian **ṯʒb** “vessel or bowl”; see Chapter 15.

The origins of the Greek **Δόλων** “bowsprit, foresail” from the Egyptian **dʒt/ drt** were discussed above.

Semitic vocabulary

It has long been seen that the Greek **ὀθόνη** (H) “fine linen, sails” derived from the Semitic **>ēṭūn** “thread, yarn, fine cloth.” Additional

meanings included “rope, cord” in Late Hebrew. In 1907 W. Spiegelberg proposed that $\text{ḥ}tūn$ itself derived from the Egyptian *idmi* “red linen.”¹¹⁴ The lexicographers of Greek, including E. Masson, all accept this sequence.¹¹⁵

In Chapter 5, I discussed the transfer of the Canaanite city name G^{webl} or G^{wibl} to the Greek Biblos or Byblos.¹¹⁶ The word **βύβλιος** “ship’s cable made of papyrus” appears in the *Odyssey*.¹¹⁷

Orel and Stolbova propose two Afroasiatic roots $\text{g}ulul$. One translates as “ball” and the other as “vessel.”¹¹⁸ In Semitic the latter is found in the Akkadian *gullu* “round basin,” Ugaritic *gl* “cup” and the Hebrew *gullāh*.¹¹⁹ It is generally agreed that the Greek **γαυλός** (5) “vessel, bowl” derives from this form. Chantraine agrees that it is possible that **γαυλος** “a type of ship” is related to **γαυλός**. He refers to Hesykhios’ having written: “they call Phoenician boats **γαυλοι**.” Chantraine continues: “this should not necessarily encourage one to look with Lewy for a Phoenician or Semitic etymology.”¹²⁰ Chantraine prefers to associate **γαυλος** with the Old High German *kiol* “vessel” and the Greek **γωλεός** “cave, hole, lair” and **γύαλον** “cup.” Conventional scholars have linked *gōleos* to the Lithuanian *guōlis* “lair, nest.” This may be the case for cups and potholes are linked semantically. Given the clear association of both **γαυλός** and **γαυλος** with Semitic, it would seem reasonable to consider an Afroasiatic source for *gōleos* and *gualon*. In fact two Afroasiatic roots exist and provide perfect phonetic and reasonable semantic prototypes: $\text{g}ol/\text{g}^{\text{w}}al$ “be round, vagina.”¹²¹ A relationship between these and *gulul* would be neatly paralleled by the Egyptian derivations of the root $\text{q}d$ meaning “circle, pot.”¹²² Thus *gōleos* and *gualon* have possible roots in both Afroasiatic and Indo-European. It is unclear which is the more likely.

The willingness to accept a Semitic origin for **γαυλός** “bowl” while balking at **γαυλος** “boat” parallels the acceptance of the Egyptian derivation *souson* “lily” and rejection of one for *souson* “ships’ cordage.” Once again this illustrates the ideological constraints under which the etymological lexicographers have been laboring.

The pan-Semitic root $\sqrt{kbr}$ has many vocalizations, including *kabāru* “great mighty” in Akkadian and *kabīr* with the same meaning in Arabic and Hebrew. The well-known derivation from this of the Kabiroi/Cabiri has been discussed in earlier volumes.¹²³ Among the many Arabic forms, there is *kubrā* “larger, older, senior ranking.” According to Chantraine, the Greek **κυβερνάω** (H) “to steer a boat, drive a chariot” has “no etymology and one supposes a loan.” Many derivatives—**κυβερνητήρ** (H)

“helmsman,” κυβερνήτης “an epithet of Isis” and κυβερνήσια “festival of ships captains”—point to “larger, older, senior ranking” and the sense of the Latin *gubernō* “to steer, govern” borrowed from the Greek. An analogy for this is the development of “captain” from *caput* “head.” Given the semantic fit, the lack of an Indo-European competitor and the propensity of both Afroasiatic and Indo-European not to contain words with more than three consonants [unless the result of reduplication], I believe it is justifiable to see the /n/ merely as a suffix.

Szemerényi made the plausible proposal that a Canaanite version of the Akkadian term, also found at Ugarit **eleppu** “light type of boat” is the origin of **λέμβος** (2) “canoe, small boat.”¹²⁴ Chantraine states “no etymology, perhaps borrowed.”

In Chapter 7, the Semitic root $\sqrt{mlh}$, in Canaanite “salt,” was mentioned in connection with the Greek *malakhē* and the Latin *malua* “mallow.”¹²⁵ In the sense of “an old salt,” it is found in the Akkadian *malāhu* Hebrew *mallā h* “sailor.” Chantraine denies the gloss given by the lexicographer Hesychios that **μαλατήρες** meant “sailors.” Szemerényi backs the ancient writer against Chantraine and plausibly proposes that the word should be derived from Semitic.¹²⁶

Szemerényi drew the obvious conclusion that **σαγήνη** (4) “large net” derived from a Semitic form also found in the Akkadian *sikinnu* “large net.”¹²⁷ Chantraine denied this on the grounds that “it is almost certainly a technical term from the substrate like ἀπήνη etc.” Szemerényi’s argument for a Semitic origin for *apēnē* was given earlier in this chapter.¹²⁸ Apart from Chantraine’s curious dismissal of such a clear semantic and phonetic parallel, it is difficult to see how a term from the substrate could have retained its initial s- after the shift s>h.

The root $\sqrt{sbl}$ appears in the Akkadian *sūbultu* “to cause to hang down,” the Arabic *sabala* with the same meaning plus “to let fall,” the Ugaritic *sblt* and the Hebrew *šibōlet* “flowing stream, ear of grain” [hanging down?]. Saying shiboleth/siboleth was, of course, the test of dialect.¹²⁹ The sense of hanging down would fit the meaning of **ἀσπαλιεύς** (3) “fisherman using line.” The prothetic vowel would shield the double consonant. For Chantraine, the etymology is obscure but could be Mediterranean.

Chantraine states that **σίφαρος** (3) “sail hoisted in calms” is a “technical term without an etymology.” By this he merely means an Indo-European etymology, because he also writes, “a plausible loan.” He goes on to suggest a Semitic source from the Akkadian *suparruru* “to spread out” of a pavilion or canopy. I see no reason to doubt this.

Conclusion

In Chapter 4, we looked at a number of proposals for an Afroasiatic origin for the PIE ***naHw-** “ship, vessel.”¹³⁰ None of the claims here for Egyptian or Semitic loans into Greek are as fundamental. Most are either special types of boats or equipment, usually sails, because of the high quality of textiles used in Egypt and the Levant for ropes and hausers. The latter are not surprising given the huge reed and papyrus marshes of the Nile Delta. Nevertheless, taken as a whole, the Afroasiatic nautical vocabulary in Greek confirms what we know from archaeology and iconography: Greek navigation was a thoroughly cosmopolitan affair.

CHAPTER 17

SEMANTIC CLUSTERS: SOCIETY, POLITICS, LAW AND ABSTRACTION

INTRODUCTION

This chapter is concerned with what in modern universities are considered the social sciences: Society, politics, law and abstraction. Greek civilization has generally been accepted, at least by Western cultures, as preeminent in these semantic areas. The number of aspects of these topics in which modern European languages draw upon Greek vocabulary is illustrative of this acceptance. Therefore, it is particularly interesting to see that many such terms that are familiar to non-Greek speakers ultimately have Afroasiatic origins.

SOCIETY

Introduction

In some ways this section can be seen as a “grab bag,” that is to say, a list of etymologies that cannot be fitted into other sections. On the other hand, its broad range illustrates the number of aspects of Greek society that have been directly or indirectly affected by speakers of Afroasiatic languages.

Egyptian vocabulary

First in our Egyptian words is **ip(3)t**, the name of the harem. The Greek **ὑπάτι** (H) is “trickery, ruse, artifice” and later attested as “pastime, pleasure.” The phonetics are excellent and the semantics interestingly attractive. For Chantraine, the etymology is “unknown.”

The Egyptian **iqr** has a wide range of meanings, all of them positive: “excellent, splendid, wealthy, superior, trustworthy.” The word provides a good etymology for **ἀγλαός** (H) “brilliant, glorious.” Chantraine is uncertain but he suggests a connection with **γελάω**, normally “laugh” but he introduces a special sense of *eclat* (*de rire*) “burst (of laughter).” This is clearly inadequate.

In addition, **iqr** supplies a good etymon for the prefix **ἀγα-** “great, glorious.” Chantraine is “uncertain” about its origin. *Aga-* is best known for its attachment to names, most famously to **Αγαμέμνων**. The origin of the second portion of the name and its Egyptian and Ethiopian connections are discussed in Volume 2.¹ Also, **iqr** “excellent” provides an explanation for **ἀγαιος**, an epithet of a sacrificial lamb in the regulations of the Labyad phratry at Delphi. Chantraine writes of this “sense and etymology unknown.” Similarly, with the liquid /i/ retained there is **Αἴγλη** (H) “radiance.” Chantraine has no etymology for this either.

On its own, **iti** is a term with a wide range of meanings: “to seize, take, carry off, plunder, surpass.” Derivatives include **itw** or **it3** “thief.” The Coptic form is **ōd**. Vycichl sees this as coming from an active participle *iātiy. In the *Iliad* there are two obscure *hapakes*: **αἴητον** and **ἄητον**.² Both contexts would fit the sense of “fierce” or “violent.” The Egyptian compound **it in** means “disorderly or erratic movement.” The verb **άάω** (H) is “to bring harm to, wander erratically.” The erratic movement is attributed to the goddess **Ατη**, who was the personification of **άάτη** or **ἄτη** “blind folly, violent recklessness.” Using an Aeolic form **άύτα** as his base, Chantraine proposes an original digamma. This proposal somewhat weakens the phonetics of the parallels with the Egyptian terms. The French lexicographer, however, states that the etymology is unknown. Thus, given the excellent semantic fit between **atē** and **iti** and **it in** and the reasonable phonetic fit there seems no reason to deny an Egyptian etymology.

Černý reconstructed **ʿ3bt** “offering gift” as ***o3bet**.³ As an adjective **ʿ3b** meant “pleasing, pleasant” but also “selfish.” The Greek **ὄλβος** (H)

is “material happiness, blest, prosperous.” Chantraine describes this etymology as “obscure.”

Klein associates the Hebrew *ʾārēb* “pleasant, sweet” with the biblical Aramaic *ʾārab* “mixed, meddled.” It can more plausibly be seen as a loan from the Egyptian *ʿ3b*.

Wr ib, literally “great heart,” meant “insolent, arrogant.” With the acceptable metathesis liquid from second to third position this word makes an excellent etymon for **ὕβρις** (H) “insolent.” Szemerényi proposed a borrowing from the hypothetical Hittite form **hu(wa)p̄par* “outrage,” based on the verb *huwap* “maltreat.”⁴ Chantraine is not convinced, nor am I.

W3w3 meant “to take counsel, consider, think about,” while **οἶομαι** (H) was “to believe, consider.” The negative **ἀνώιστος** was “without consideration.” Chantraine believes that the *sigma* in such forms is primary at the beginning of a long chain of reconstruction: **ὀῖσ-γομαι* > **ὀ(F)ίο-γομαι* > **ὀ(F)-γομαι* > **οἶομαι**. Chantraine admits the etymology is unknown. Although the Egyptian etymology cannot explain the /s/ in some composite forms, it is otherwise strong in both phonetics and semantics.

The earliest meaning of **πράττω/πράσσω** is “to pass through” etc. This fits well with the Canaanite **pāraṣ** “to break through, break/burst out of the womb.” A root *pra-* with a final velar is found in the perfect **πέπραγα**, future **πράξω** with a further meaning of “accomplish, practice.” I believe that the phonetic complexity that baffles Chantraine and the other lexicographers should be seen together with semantic ambiguity and explained by the confusion of two distinct Afroasiatic verbs. The first of these is *pāraṣ*, the second the Egyptian **b3k** “to serve, work, carry out.”

Prattō completes the Greek words of Afroasiatic origin for “to do, make.” *Draō* and *poieō* were introduced in Chapter 9.⁵

The third person in the Greek pronominal system is extremely irregular. In Chapter 6, I considered *autos*, substituting for the oblique cases.⁶ Then there is **μιν** Dorian **νιμ**, the accusative “him, her, it,” of all genders. Chantraine describes the etymology as “obscure.” The Egyptian **mn** Coptic *man* or *nim* meant “someone, a certain person or thing” and may derive from a Nostratic root **mən*⁷ found in the Indo-European **mann-s* and the Proto-Afroasiatic **man*, **mayan*.⁷ Later in this chapter I shall argue that *monos* “alone, unique” comes from the same root.

In Chapter 8, I considered the correspondence of Egyptian /m/ to Greek /ph/. One example was *mrw* “weavers, serfs, lower classes” to the Greek φαῦλος.⁸ Other loans were more straightforward. The collective *mrt* “weavers” has an exact correspondence with **meritewo** “weavers” in Linear B.

Lexicographers have naturally subsumed **νεανίας** (H) “young man, youth” under the oldest and most widespread Indo-European root *nu or *newa “new.” Chantraine devotes a long paragraph in an attempt to place *neanias* in this cluster but he comes up without a satisfactory explanation. It would seem simpler to accept that it does not fit the Indo-European root and to derive it from the Egyptian **nḥn** “young, youthful.”

Although there is an exchange of the Egyptian medial -n- to Greek medial -m-, I have not found an accepted one of initial n->m-. Nevertheless, the semantic precision allowed Jernstedt to propose a loan from the Egyptian **nkw**, Coptic **noeik** (S) **nōik** (B) “adulterer” to the Greek **μοιχός** “adulterer.”⁹ Chantraine states that “everyone agrees that **μοιχός** is nominal agent of **ὀμείχω** “piss.” He concedes a problem with the initial o- and is hesitant about the semantic correspondence. Both arguments have problems that could be reconciled by proposing confusion of two sources.

Chantraine cannot find an Indo-European etymology for **πέμπω** (H) “to send, escort.” He, therefore, inclines to a “Pelagic” or substrate source. There is, however, a possible Egyptian etymon in **ḥpp** “to send off.” Attested examples of medial -ḥ-=-ø- exist but none of ḥ-=-ø-. In Chapter 10, I argued a parallel case that the young sun god Ḥpr̥ became Apollo in Greece. Thus the derivation of *pēmpō* from **ḥpp** remains a strong possibility.

The Egyptian **qm̥** has a number of apparently disparate meanings: “to throw, create, produce, hammer out.” The common theme appears to be “craft.” Whether or not *qm̥* “throw” is the potter throwing clay on the wheel, the association of pottery with creation can be seen in the cult of the ram god and potter of creation Khnum and the mythical birth of Hatshepsut as represented at Deir el Bahri. On the principle of exchange of liquids in the second and third positions, it would seem permissible to postulate an alternative form *q̥3m. In the absence of an Indo-European competitor, this form provides a reasonable etymology **κέραμος** (H) “potting clay, tile, jar,” not necessarily of clay.

In Volume 2, I discussed the links between the legendary ruler Danaos, the Danaans and the “Sea People” known to the Egyptians as Tin̥3w/

Tanaya or Dʒin. Dene.¹⁰ Danaos' legendary great age almost certainly came from the Egyptian **tni** from an earlier **tni** "old, decrepit, become feeble." A proposal to derive the Greek root **θν** found in **θνήσκω** "die" and **θάνατος** (H) "death" would seem far-fetched, if it were not for the euphemisms surrounding "death" in many cultures. Indeed, Chantraine tentatively proposes one when he suggests cognicity with a Sanskrit cluster around *dhvān-* *ta* "somber." Both etymologies are possible but the Egyptian one is equally close in phonetics and closer in meaning.

T3m, Coptic *jēme* (S) *cēme* (B) is "to wrap enclose, cloak, veil." The Greek **θάλαμος** (H) is discussed in the next chapter.¹¹

In Chapter 5, I referred to the name Theseus as coming from the Egyptian *tsw* "commander."¹² This source word is derived from a root *ts* "tie together, marshal troops." **Tst** are troops or a requisitioned gang of workmen. **Θής** (**θητός**) (H) is a "slave, paid worker, laborer, lowest stratum of citizens." In Greece today, **θητεία** is "military service." Neither Frisk nor Chantraine provides an etymology and the latter concludes "perhaps a loan."

Dw3 wr was the "deified royal beard." In Greek **δανλός** (H) was "bushy bearded, associated with Zeus." Chantraine is skeptical of previous proposed etymologies.

Semitic Vocabulary

In Chapter 8, I discussed the relationship between **ʔahābāh** "love" **ʔagab** "sensuous love," and **ἀγαπάω** "love."¹³

Bāyay, **bī** are particles of entreaty in Arabic and Hebrew, used in formulae of address to superiors. **βαίος** (5) is "small, without importance, mean and humble." It has no Indo-European etymology.

The Greek **βάρβαρος** (H) is generally thought to be onomatopaeic, the result of stammering or the language of unintelligible foreigners. Chantraine cites the Sanskrit *babara-* "stammerer," but he also mentions the Sumerian *bar bar* "stranger" and the Akkadian *barbaru* "wolf." He denies both, however, seeing the form as perfectly Indo-European. He does not touch on the almost complete absence of /b/ in Greek words of Indo-European origin.

There is, however another possible Semitic etymon in the root √gwr. *Gēr* is a "sojourner, neighbor, newcomer, stranger." The /w/ in the root makes it permissible to postulate an earlier form *g^wer or *g^war. A connection with unintelligible speech is made in the Ethiopic *g^warg^war*

“confused murmur.” Following the argument put forward in Chapter 5, *g^warg^war* could have been introduced before the breakdown of labiovelars in Greek and have shifted regularly to *barbaros*.¹⁴ Γάργαρα “chattering crowd” would have been introduced after the breakdown of labiovelars in both languages.

Orel and Stolbova reconstruct an Afroasiatic root *bat-/bit “cut.”¹⁵ In Semitic a number of trilaterals exist with the same general meaning. Thus, it is assumed that the root √btl is “to sever.” A widespread and uniform version is what appears to be a passive participle, the form **batul** “virgin” boy or girl. Referring to these young people as “cut” suggests male circumcision, which is known to have existed among Semitic speakers, and female genital mutilation, which may have also. Μίτυλος (3) and μύτιλος are two obscure, but related, Greek terms. In one sense they refer to a ram without horns and in another to the youngest child. The Latin *mutilus* borrowed from *mytilos* means “dehorned.” Thus in Greek and Latin, as in Semitic, one finds the double meaning of youth and cutting. This semantic correspondence, more than makes up for the alternation, initial m- for initial b- for which there are other examples.

Hbr. The basic meaning of the Semitic root √hbr is “to join, associate” but with frequent associations of magic, idols and badness. It is found in the Ugaritic *hbr* and the Phoenician *hbr* and the Hebrew **hābēr** “companion.” The Greek ἄβρῶς (H) means “gracious, delicate, pretty.” It and the feminine ἄβρα became associated with effeminacy and “oriental” luxury. Scholars have long seen connections between the Aramaic *hābēr* and the Greek word.¹⁶ E. Masson, however, denied claims on the following grounds: that the Semitic terms do not refer to a servant but to a companion of equal rank, that the Aramaic feminine was *habertta* and that an Aramaic loan would be difficult to explain during the epoch of Menander, fourth to third centuries BCE. The last reason is strange because (1) The loan did not have to be from Aramaic rather than from Canaanite; *hbr* existed in both Phoenician and Hebrew. (2) Plenty of Aramaic was spoken during the lifetime of Menander. (3) The word is attested in a fragment from Hesiod, centuries before Menander.¹⁷ It is sad to see Chantraine following such niggling pedantry.

Another word ἀπαλός (H) “tender, delicate” has a similar sense and, with slight alteration, fits the phonetics relatively well. Chantraine writes “no etymology.” The Semitic root √wqh found in the Arabic *waqita* “to

be obedient” and the Sabaeen *wqh* “hear [favorably]” appears in Akkadian as *âqû* “obedient.” Presumably, the Canaanite would have been *yâqah. The attested noun *yiqhâh* is “obedience.” **Ἀκούω** (7) is “to hear, understand.” Chantraine’s preferred etymology is from a root found in the Gothic *hausjan* “hear.” He has difficulty with the prothetic a-, but he relates *akouō* to **κοέω** *kowō*? “to perceive, understand, hear.” This he sees as cognate to the Old Saxon *skawōn* “to observe” and the Sanskrit *kavi* “wise.” While the connection between *akouō* and *koēō* is plausible. The rest of the scheme seems very flimsy. An etymology for *akouō* from *yâqah is much less unlikely.

The use of “boy” for servant is a widespread phenomenon across languages: *garçon* in French, *tóng* in Chinese, for example. The Arabic *yatim*, Hebrew *yâtom* and Aramaic **yatmāh** all mean “orphan, helpless child.” A form resembling the Aramaic probably gave us **ἄτιμν** (3) “servant, slave.” Chantraine describes this as “obscure” and says it “risks being a loan.” He favors seeing it as coming from Asia Minor.

For the etymology of the stem **ψεῦδ-** “false” from the Semitic √zwd “to lie, exaggerate,” see Chapter 14.¹⁸

A sinister standard image of Phoenician art is of a woman looking through a lattice window, symbolizing enclosure. In Hebrew the plural form for “lattices” is *hărakîm*. In Aramaic one finds *hărakâ* “window.” In Greek, **ἔρκος** (H) was “enclosure around house, by barrier or wall, net for hunting” and **ὄρκάνη** (6) was a “prison.” Chantraine associates the form with the Latin *sarcio* “to re sew, repair.” He sees the general sense as “weaving.” Although the Hebrew and Aramaic words do not appear to have deep roots in Semitic, they do provide a more plausible source for the Greek word than the one Chantraine offers.

The etymology of **ἑτοίμος** “ready, sure,” which Chantraine describes as “obscure,” was discussed in Chapter 14.¹⁹

The Central Chadic language of Musgum has a root *kas “fall” which, with a prefixed n-, is found in the Semitic, Jibbali and Arabic. Another plausible extension with a final -l is the Hebrew *kāšal* “to stumble, stagger, totter,” which in the hiphil-derived conjugation is “to cause to stumble, bring injury or ruin.” Greek has **κασάλβιον** “brothel” and **κασαλβάζω** “to live as a prostitute.” The final syllables remain unexplained but the basic *kasal* fits well. Chantraine subsumes these words under **κασᾶς** (3) “coarse coverlet.” He accepts E. Masson’s view that this has a Semitic origin found in the Akkadian *kasû* and the Hebrew *kāšūt* “covering.”²⁰

The derivation of the Greek **λαός**, “people” from the West Semitic $\sqrt{1}>m$ was discussed in Chapter 13.²¹

The origin of **λέγω** and **λόγος** with their multiple meanings from the West Semitic $\sqrt{1}qh$ with its multiple meanings was considered in Chapter 14.²² As an addendum to this discussion, the Arabic *laqaḥa* is “to take” a woman “impregnate.” This provides an origin for the obscure Greek verbs **ληκάω** (4) and **λαικάζω** (4) “to fornicate, make love.”

The possibly Semitic and ultimately Egyptian origin of **λέσχη** was discussed in Chapter 7.²³

Μάκελλον (1) was “grill, cloister” later, probably from Latin, “market or butcher’s stall.” Not surprisingly, the lexicographers are open to the idea that it could have a Semitic etymology, and Chantraine mentions two possibilities. He is doubtful of Lewy’s proposal that it derives from *miklāh* “enclosure” but notes a suggestion that it comes from the widespread Semitic root $\sqrt{1}mkr$ “to sell, merchant” found in Ugaritic, Phoenician, and Hebrew.²⁴ He makes no comment about Mayer’s derivation of *makellon* from the Semitic root $\sqrt{1}mkr$.²⁵

The root found in the Akkadian *manū*, the Arabic *manay* “to assign, apportion” and the Hebrew *mānāh* “to count, assign,” provides a plausible etymology for **μηνύω** (H) “to inform, indicate, denounce.” Chantraine writes “no etymology.”

The root $\sqrt{1}m\dot{s}$ is widespread in Semitic. The Akkadian *māseū* and the Ugaritic and Ge’ez $m\dot{s}$ all mean “to arrive, attain.” The Hebrew and the Aramaic forms **מֵאֵשׁ** have the additional senses of “to seek, find.” A number of Greek terms beginning mas- or mat- have similar meanings. The lexicographers agree that **μαίομαι** (6) “to search, pursue, reach” rests on a form **μασ-yo-μαι**. Chantraine gives as his first sense of **ματέω** (6) “to search, pursue.” The verb **μῶμαι** (6) is “to desire, aim for.” Its third-person singular is **μῶται** and the imperative is **μῶσο**. Chantraine senses a relationship with **μαίομαι**. He points out, however, that the latter too lacks a clear etymology. **Μῶμαι** appears to be a borrowing after the Canaanite shift $\bar{a} > \bar{o}$.

The Akkadian *nakālu* is “to be crafty, cunning”; the Hebrew *nākal* is “to be crafty, deceitful.” A punning attestation in the Piel conjugation goes: “**niklēhem** ašer **niklū** lākem “their wives with which they deceived you.”²⁶ Given the worldwide reputation of slaves for craftiness, this definition fits reasonably well with the Greek **νικύρτας** (6) “born slave” Chantraine states merely that it may be an Asiatic borrowing.²⁷

The etymology of a number of Greek words associated with mourning from the Semitic root $\sqrt{\text{spd}}$ was set out in Chapter 13.²⁸

I discussed the derivation of ἀγαπάω “love” from $\sqrt{>\text{gb}}$ “sensuous love” in Chapter 8.²⁹

The possible derivation of ξένος “stranger, guest” from Semitic $\sqrt{\text{sn}}$ “enemy” was discussed in Chapter 13.³⁰

The origin of σχολή in the sense of “rest and leisure” comes from the Semitic root found in the Ugaritic šlw Hebrew šālu or šālī “rest, ease”³¹

The Phoenician šmr, Hebrew šāmar is “to keep watch, guard, protect.” This provides a plausible etymon for the first part of the Greek σαβαρίχης or σαμαρίχη “women’s sex.” The second half is less easy to explain; Chantraine has no etymology for the word.

Conclusion

The etymologies proposed in this book vary greatly both in their importance and in their quality. On both scores the range is probably at its greatest in this section. The origins of the centrally important terms *laos* “people” from Semitic and *hybris* “fatal pride” from Egyptian contrasts with those of *daulos* “bushy beard” and *baios*, an obscure form of humble address. On the aspect of quality they vary from the possible $\text{h}\text{pp}>\text{pemp}\bar{o}$ to the extremely plausible derivation of *olbos* “pleasing and prosperous” from the Egyptian ʿ3b with the same meaning. Taken together, however, they show the centrally important role of Afroasiatic languages in the formation of Greek social terms and hence the great influence of Egyptian and West Semitic speakers on early Greek society itself.

POLITICS

Egyptian vocabulary

As a former professor of “government,” I know how difficult it is to make useful distinctions between society and politics. I have tried to draw the line between those organizations and processes that affect the running of the polity, city or state and those that do not.

The key word in the image of Greece is Ελευθερος “liberty.” A tentative etymology from ir(t) ḥ3wt “celebrate a festival” will be set out in the next chapter.³²

In Egypt, *i3wt* was a “herd of cattle or humans,” *irw/y* was a “levy for the cattle tax.” “This gives a reasonable etymology for ἄλλης/ἄλλης (5) “assembly.” (As Chantraine points out there are readings for this and the associated words both with or without rough breathing.) The vowel or diphthong was varied: ἀολλής and ἀέλλης. Moreover there are, as Chantraine indicates, other terms that are clearly related: ἄλις (H) “in mass” and εἴλω (H). The last has a number of meanings: “shut in [usually of people], press [olives and grapes], wind, turn.” The editors of the Liddell, Scott, Jones Lexicon (LSJ) specifically deny that these meanings have a general sense of “squeeze.” “Wind” is clearly anomalous and can be explained as “contamination” from the verb εἰλύω “roll, twist,” which like the Latin *volvo*, comes from an Indo-European root for “turn.” The other meanings, however, can be subsumed under the sense of “squeeze” and fit well with an Egyptian origin in cattle counting. The confusion of terms suggests a borrowing. It is interesting to note that the Athenian counterpart to the Ionian and Dorian *ālēs* was ἄθροός “crowd, squeezed together” derived from the Egyptian *idri* “herd” raised in Chapter 15.

irr “evildoer,” *irrt* “work” provide a reasonable etymology for the Homeric hapax εἶρερον “slavery.” Chantraine denies any link with the Latin *servus* and is skeptical of all other proposals.

The derivation of αἶσα “share, destiny” ἄξιός “equivalent, counter-balance” and ἴσος and the prefix ἰσο- “balance, level, equal” from *isw* Coptic *asou* “reward, compensation,” was discussed in Chapter 12.³³

The proposal to derive ἴδιος “simple, inexperienced common citizen” from the Egyptian *id* “child” was made in Chapter 9.³⁴

The derivation of ὄχλος “the mob, the masses, “from ṣ3 “many numerous, troublesome” was given in Chapter 8.³⁵

The origin of βασιλεύς “high official” later “king” from the Egyptian *p3 sr* or *pasiyara* is discussed at length in Chapter 9.³⁶

Rh is “to know” and as a noun “wisdom” and *rht* is “knowledge and number.” In Late Egyptian *rh* is also attested with the meanings “take note,” and “list.” The Demotic *rh* and the Coptic *rōs* (S) and *raš* (B) included the meanings “measure” and “affirm.” Λαγγάνω the stem *λαχ-* is “draw by lot,” frequently used in Greek politics. At a theological level λόγχη, λάχος and Λάχεσις all meant “fate.”

The lexicographers see κῆρυξ, *karuke* in Linear B, as coming from an Indo-European root found in the Sanskrit *kārū* “poet, singer.” Apart from the semantic looseness, the lack of a final k is a problem. The same is

true of a derivation from the Semitic root $\sqrt{qr}$ “call.” A much more probable origin is from the frequently attested Egyptian **q3 hrw** “loud of voice.” It is interesting to note that one of the two first heralds mentioned in the *Iliad* was Εὐρυβάτης who was described as “round-shouldered, dark of skin, and curly haired.”³⁷ The tradition or stereotype that Africans have loud and melodious voices can be seen again in Mohammed’s choice of the Black Bilāl to chant the first *muezzin* or call to prayer.

The origin of **ἔθνος** from *tnw* “number, numbering” and *tnwt* “census of cattle, prisoners etc.” was given in Chapter 8.³⁸

In Chapter 12 I discuss of **dmī** “town, village” and **dmīw** “townsmen” as the origin of **δήμος** *damo* in Linear B.

Semitic vocabulary

In the last chapter I discussed the Semitic root $\sqrt{>rh}$ and one of its reflexes in Greek, **ἀρχ-** which became the root of many important political terms: **ἀρχός** “chief,” **ἀρχή** “political power,” **ἄρχων** “magistrate.”³⁹

The derivation of the Greek **κοινός** (H) “common, public, impartial” from the Canaanite $\sqrt{kwn}$ “establish, correct” was covered in Chapter 5.⁴⁰

In biblical Hebrew one finds the verb *pālāl* “arbitrate, judge.” In Late Hebrew there is the noun *pilpēl* “one skilled in debating.” The *Odyssey* refers to the **Φοίνικες πολυπαίπαλοι** “wily Phoenicians.”⁴¹ The modifier *-paipaloi* makes an excellent fit with *pilpēl*. Since **πέρπερος** (2) “boaster, trying to be smart” is only attested late, Chantraine suggests that it may be a loan from the Latin *perperam* “oblique, contrary, bad.” Although the phonetics of the Latin etymology are marginally better the semantics favor the Semitic one.

For my proposal to derive **βούλη** “assembly, council” from the Canaanite *qāhāl* “assembly,” see Chapter 14.⁴²

The common Semitic root $\sqrt{r>s}$ “head, leader” was almost certainly originally vocalized **ra>s** as it still is in Arabic. In Ugaritic it was *re/i>s*.

In Hebrew it is *rō>š*. The meaning of **Ρησός** (5) is doubtful but it is assumed to be “leader.” In this case the etymology would almost certainly be from an early borrowing from *ra>s* going through the shift *ā>ē*, just as the Canaanite went from *ā>ō*.

Conclusion

This section reveals two very interesting political and historical features. First Egyptian terms for bureaucratic counting or censuses of cattle and prisoners—*irw/y* “cattle count” *idri* “herd”—become in Greek, *(h)ālēs* and *athroos*, words for popular assemblies. Only *ethnos* from *tnwt* “counting of cattle or prisoners” retained something of its original official origin. This underlines the difference between centralized bureaucratic Egypt and the scattered Greek *poleis*. The terms were very probably introduced into the bureaucratic palatial society of Mycenaean Greece and only later developed their popular meanings.

Elsewhere I have argued, and this is the second interesting feature, that many if not most economic, social and political aspects of the *polis* were based on Phoenician models.⁴³ This makes the number of Egyptian, as opposed to Semitic, terms in this section particularly striking. While some of the building blocks of “political” terminology of the Archaic and Classical periods *arkh-* and *koin-* come from Semitic, many others—including *dēmos*, *okhlos*, *iso-*, and *idios*—have plausible Egyptian etymologies and entered Greek well before the sixth-century tide of Egyptian influence on Greece. The one significant political term with a plausible Semitic etymology *boulē* must have entered Greek before the breakdown of labiovelars. By the First Millennium they must have been accepted as native. The best explanation is that rather than accepting new Semitic names for the institutions copied from the Levant, Greeks often preferred to use and develop existing ones. Sometimes the words were native Indo-European but more often they were Egyptian and were borrowed in the Late Bronze Age or earlier. A specific example of these stages can be seen in Martin West’s detailed demonstration of parallels between Greek and southwest Asian types of oaths, but he is unable to explain *horkos* the word for “oath” itself, which has a good Egyptian etymology.⁴⁴

In the next chapter, we shall see a similar pattern of Egyptian divine names being set in a predominantly southwest Asian theogony.

LAW AND ORDER

Introduction

This section overlaps both of the two previous ones because law is at the intersection of polity and society. I believe that the higher proportion of Egyptian over Semitic terms I have found in this semantic region can be

explained for the same reasons given in the conclusion to the previous section.

Egyptian vocabulary

Ἀλόταξ (5) is “police officer at Elis, probably a supervisor of the Olympic games.” Chantraine accepts the theory that it is linked to the Gothic *walus* “baton,” reconstructing a **Ἔαλυ-τᾶς* “man of the baton.” There are two, not necessarily exclusive, Egyptian etymologies: first, **ī3t** “office, function” and **ī3tyw** “office holders” and, second, **ī33yt** “rod.”

Clearly, **īpwty** > **wpwty** “messenger, agent,” is related to the verb **wpi** in the sense of “judge contestants at law.” This double connotation provides a good explanation for the Greek **ἡπύτα** (H) “sonorous voice of a herald” and **ἡπύω** (H) “call in a loud voice to convoke before a tribunal.” Chantraine describes their etymology as “obscure.”

Chantraine sharply distinguishes between what he sees as two independent meanings of the word **ἐφέται**. The first, a hapax in Aiskhylos, means merely “chiefs.” The second, found on inscriptions, is the institutional name of a college of judges at Athens; this college specialized in trials of mitigated murder or manslaughter. The lexicographers derive this from the suffix **-τας** on a form of the verb **ἐφίεμι** “sent out, delegated.” This is plausible but some of the confusion could well have been caused by “contamination” from **īpwty**.

In another legal area, **īdryt** “punishment,” appears to be a nominal form of the verbs **d3i** and **d3r** “to subdue, suppress, rob someone of their goods.” Much vagueness and some disagreement exists about the word **ἀΐδηλος**. All one can say is that when used as an epithet of Athena and Ares it is “destructive.”⁴⁵ When the word is used as an epithet of “fire” or of Penelope’s suitors, “consuming” corresponds well with the last sense given to **d3r**.⁴⁶ The commonly held view that *áidēlos* comes from a privative *α-ideîn* “make disappear” is extremely implausible.

In a discussion of the origin of **ἀνάγκη** “necessity” in Chapter 10, I discussed the Egyptian **‘nh** in the sense of “bound, constrain,” Coptic *anaš* (SB) *anaḥ* (A) “oath, something you are bound to.”⁴⁷ Vycichl argued for a correspondence between **‘nh** and *ʿnq* “oath.” I find the correspondence **h**=**q** somewhat difficult but Orel and Stolbova see it as a standard alternation within Afroasiatic.⁴⁸ In any event, at least one plausible example can be found in the attractive parallel between Homer’s **Ἀχαιοί** Achaeans and the “People of the Sea” called **īqwš** by Egyptians.⁴⁹

Be that as it may, like *ʿnh*, *ʿrq* too has a plausible reflex in Greek. In 1763, L' Abbé Jean Jacques Barthelemy proposed deriving the Greek ὄρκος (H) “to bind, swear, oath” from the Coptic ὄrk.⁵⁰ ὄrk was the descendent of *ʿrq*. Chantraine provided no etymology but Szemerényi tried to derive it from a Indo-European root *sworkos. There is a Germanic root *swer as in “to swear, answer.” I can find no justification for the final -k.

P3wt meant “primeval time.” **P3wty** was a “primeval god” or a “man of ancient family.” In many cities **πρύτανις** (H) was the title of senior magistrates and an epithet used for important gods. Chantraine notes the Etruscan *purth*, *purthne* “magistrate” and, therefore, sees the Greek title as borrowed from Anatolian. He points out that the variety of forms indicates a loan. Etruscan is the only Anatolian language in which the word is attested. Nevertheless, as the Egyptian word lacks the /n/ it is more likely that the word comes from Anatolia. Ultimately, however, the Anatolian term would seem to come from *p3wty*.

The Egyptian etymology of **μά** “truly!” used in oaths is discussed in Chapter 10.⁵¹

The Egyptian **mtr** Coptic *mntre* (S) *methre* (B) “witness” provides an excellent source for the Greek **μάρτυς, μαρτυρος** (4). Chantraine is skeptical of Frisk’s *mar-tu “testimony” but suggests that the word could be cognate to the Sanskrit *smáratī*.

The Egyptian etymology of **νόμος** “custom, law” was set out in Chapter 12.⁵²

Hp, **hpw** Coptic *hap* “laws, rights, justice” **ἥπιος** (H) “sweet benevolent as a father, reasonable.” Chantraine describes the Greek word as “obscure.” He is not impressed by attempts to associate it with the Sanskrit *āpi* “friend.”

The etymologies of **χαλεπός**- “painful, cruel” **κόλαφος** “punch, beating” and **κόπτω** “punch, strike” from **hrp** “baton of office, govern, control” were proposed in Chapter 8.⁵³

The verb **snh(y)** was “to register, record, muster.” **Snh** was a “registry.” Also, **σανίς** (H) was a “plank, writing tablet,” notably to inscribe official texts. Chantraine offers no etymology.

The *q3* in *q3 hrw/κηρυξ* discussed above is “high.”⁵⁴ Redoubled **q33** is “high ground,” written with □ (O40) or △ (O41) indicating terraces. The **κάλλιον** (4) was the precinct where an Athenian tribunal sat.” Chantraine has no etymology.

Qnb was “to bend subjugate, fetter, bow low.” The Greek **γνάπτω**

(H) is “bend a limb, a person, a person’s will, subjugate.” Chantraine has no etymology.

Qnbt was a “court of magistrates, tribunal, judicial council etc.” With the definite article ***P3 qnbt** could well be the etymon of **Πνύξ, Πυκνός** (5), the meeting place for the citizen juries of Athens.⁵⁵ The semantic fit is excellent and may be reinforced by the use of the 𐤒 (O38) “corner” as the determinative of *qnb*. Gardiner suggested that it may be that the magistrates sat at a corner.⁵⁶ The Pnyx had an amphitheatral shape and was against a high cliff. On the other hand, the word could also have some connotations from *qnb* “subjugate.”

Tn, later **tn**, was a postposed feminine deictic. It provides a reasonable etymology for **θην** (H) an emphatic enclitic “really, truly.”⁵⁷ It may also be the source of **δεῖνα** (5) “such and such, often indicating hesitation.” Chantraine has no explanation for either.

The etymology of **τίνω** “pay debt or fine” from **dit inw** “cause to bring [*inw* /tribute]” was set out in Chapter 9. So, too, are the legal senses of **dit m3** /**τιμή**.⁵⁸

In Chapter 15 I discussed **dni** as a dam or water channel and further meanings of “to allot, distribute” and **dnyt** a “land register.” These provide a reasonable etymology for **δῆνεα** (H) “plans good or bad.”⁵⁹

Semitic vocabulary

No one has ever doubted that the Greek letter **λάμδα** (4) derives from an earlier Semitic form of that found in the Hebrew letter name *lamed*. The shape Λ or L comes from an ox goad. This root is present with the nominal prefix m- in the Hebrew *malʾamad*, with that meaning. Chantraine believes that the earliest Greek form is not **λάμδα** but **λάβδα**. He does not state it but the reason for the development of the later *lamda* can only have been as hypercorrection to return to the original Semitic form. *Labda* makes an excellent parallel to **ῥάβδος** (5) “stick, wand, sign of authority.” Chantraine prefers to relate it to a Balto-Slav root ***√wr̥b** “branch, reed.” Then there is **ᾗβδης** (6CE) “whip.” Chantraine dismisses the claim “made without evidence” that it is a loan from Asianic.

Conclusion

The disproportion of words with etymologies from Egyptian, as opposed to Semitic, origins in this semantic area is even more extreme than the

pattern seen in the section on politics above. Once more, the pattern suggests that Greeks had a legal vocabulary from the Bronze Age available to be used in the new age of the *polis*. It is striking that almost all basic legal terms in English have French or Latin etymologies: bar, counsel, court, judge, jury, testimony etc. These reflect both the Norman Conquest and the high status of French in England during the Middle Ages. If, as seems probable, the Hyksos were predominantly Semitic speaking, it would seem that the presence of so many words of Egyptian origin in this sphere of the Greek vocabulary indicates not conquest but the high status of Egyptian during the New Kingdom in the second half of the Second Millennium and again in the late seventh and sixth centuries BCE.

ABSTRACTION

Abstraction is the inner sanctum of the Greek vocabulary. The continued use of these terms in “western” philosophy have given these words, and ancient Greek culture as whole, an important impetus to elevation to the superhuman, universal and eternal.

Egyptian vocabulary

The verb *ii* is “to come, occur.” It is found in the idioms *iw spf* “him in whom fault had occurred” and *m ii n* “outcome, as a consequence of.” In addition, *iyt* is “mishap” but also what “is to come.” The Greek **αἴτιος** (H) “responsible, who is the cause of, accuse, illness,” finally the philosophical sense “cause.” Chantraine considers the possibility of a cognate in the Avestan *aēta* “fault, punishment.” With its semantic grounds the Egyptian etymology appears marginally better.

One of the many meanings of the verb **iri** “to make, construct” is “to work out mathematically.” Chantraine breaks up **ἀριθμός** (H) “count, number, sometimes arithmetic” into a stem **ἀρι-** and a suffix **-θμός**. He proposes cognicity with the Old High German and Irish *ri*m “number” and with an Indo-European theme *ri. He cannot explain the initial α-. The Egyptian etymology solves this problem, although the semantics are merely passable.

Next, **ikm** is a form of *km* “complete, completion, conclusion,” attested with a prothetic i- in Late Egyptian, and **ἀκμή** (H) is “culminating point, opportune moment.” Chantraine subsumes this form as an expansion of the Indo-European *ak “sharp,” although he admits that no

parallel for *akmē* exists. The Egyptian etymology is discussed in Chapter 5.⁶⁰

The derivation of **ἀνάγκη** “constraint, necessity” from **ῥnh** was given above and in Chapter 10.⁶¹

A reasonable etymology for a **ὀρθός** (H) “erect, perpendicular, straight line” can be found in **w3t** “cord,” and **w3w3t** “plumbline.” The Sanskrit *ūrdhvá* “erect, high” offers serious competition. Chantraine postulates an original **ForθFός*, although only *Forθός* is attested. The double digammas would correspond with either the Egyptian or the Sanskrit etymologies.

Numbers are inherently abstractions and most of those in Greek are firmly Indo-European. Nevertheless, there are some exceptions and, interestingly, in Greek one of them is “one.” In Chapter 3, I mentioned that the Egyptian word for “one” written with a uniserial harpoon  (T21) was **w** and that **wi** is to be “alone.”⁶² In Greek **οἷος** is “one, alone.” Chantraine reconstructs a suffix *-Fος* “indicating a spatial relationship.” He then relates the stem to the Avestan *āeva* and Sanskrit *eka* “one.” The Egyptian etymology is more direct.

Earlier in this chapter, I pointed out that the Egyptian **mn** Coptic *man* or *nim* meant “someone, a certain person, or thing.” Despite difficulties with vocalization, this source is plausible for **μόνος** (H) “alone, unique.” Apart from speculating that in this case too there was the suffix *-Fος* Chantraine dismisses previous suggestions.

In Volume 2 and elsewhere, I have argued for Egyptian origins of **ἐκατόν** (H) “hundred” from **hq3t** “hundred measure” and **χιλ-** “thousand” from **h3** “thousand.”⁶³ The Egyptian word for “ten thousand” **hfn** provides an etymology for the Greek **ᾠφενος** “riches, opulence, abundance,” which Frisk describes as “unexplained.”

M33 is “to see, look.” In the latter sense it may well be the indirect origin of the Old Latin root **mir* to “look.” **M33** is also used in the personal sense of a “seer.” With the preposition /r/ added, **m33-r** is “to look to, take care of, toward, take care of.” The Greek **μέλλω** (H) is “destined, about to, take heed of.” All are concerned with the future. There may also be influence from the Egyptian *m3* “new, renew.” Chantraine cannot explain the geminated /l/ and dismisses both attempts to link it to Celtic *mall* “slow, soft” and Pokorny’s attempt to associate it with **μέλω** “concern, care.” I believe Pokorny may be right and *melō* too may come from **m33**.⁶⁴ Chantraine describes its etymology as “unknown.”

In the section on law I stated the argument that the Greek **μάρτυς, μαρτυρος** “witness” derived from the Egyptian **mtr** “testify, witness.”⁶⁵ However, the Egyptian word also had the extended meanings “to demonstrate, instruct, recognize.” Confusion between teaching and learning is a common feature in many languages, as in “I’ll learn you!” Thus it is permissible to propose that the Greek **μανθάνω** (H) root **μαθ-** “to learn, study, understand” derives from *mtr*, possibly confused with **mtj** “straight-forward, precise.” Chantraine dismisses suggested Indo-European etyma as “far from the sense”; most in fact contain /n/, which is merely an infix marking the present in *manthanō*. He even rejects possible cognicity with the Sanskrit *medhā* “wisdom,” which seems to me more plausible, though not as good as that from *mtr*.

The African origin of the Greek **νόος** “intelligence, perception,” was discussed in Chapter 12.⁶⁶

In Chapter 10, I considered the etymology of many of the words with the stems **τέλ-**, **τέλος** “to the limit, complete, fulfilled perfect” and **τῆλε** “far, distant” from the Egyptian **(r)-dr**.⁶⁷

The overall meaning of **h3w**, *hē* or *he* in Coptic was “enclosing boundary.” It applied to kin; space, including vicinity and neighborhood; and time, including lifetime.⁶⁸ The Greek **ὄρος** (H) (**οὔρος**) was “boundary, limit in space and time; intervals in music and numbers; definition in logic.” Chantraine emphasizes forms, largely inscriptional without aspiration and argues that even the Attic aspiration may come from the loss of an original /w/. He is interested in the idea of a link with the Oscan *uruvū* “furrow, boundary.” Nevertheless, his general attitude towards the etymology is “little certain.”

The derivation of **Σοφία**, “wisdom” from **sb3** “learning” was discussed at length in Chapter 10.⁶⁹

Sh̥t, Coptic *sōšē* “marsh, meadow, field, country as opposed to town” is written with the determinative **𐩣𐩢𐩨** (M20) “reeds growing side by side.”⁷⁰ It provides a good basis for **ἔσχατος** (H) “edge, end, extreme” initially in space, later applied to time and morality. Chantraine sees it as certainly derived from **ἐξ** “out” but beyond that he is unsure. This derivation could explain the prothetic e-, which could equally, or better, be derived from the coming together of the /s/ and the /h/. Thus, the Egyptian etymology explains more. In an earlier chapter, I argued that the Egyptian paradise the “field of rushes”—**Sh̥t i3rw**—could, with the disappearance of the feminine /t/—as in *sōšē*—**Sh̥ i3rw**, provide a plausible etymology for **Σχερίη**, the dreamlike island in the *Odyssey*.⁷¹

A connection between **τάσσω** root **ταχ-** “to place, set in order, assign, prescribe” and the Egyptian **t(3)š** “to limit, fix, assign, decide” was proposed in Chapter 8.⁷²

In Chapter 12, I argued that a Nostratic emphatic */t'/ could become either /t/ or /d/ in Egyptian, and in Chapter 15, I cited Takács who provides examples of Proto-Afroasiatic /t'/ resulting in /t/ in Egyptian.⁷³ In Indo-European /t'/ became /t/ in Germanic and Armenian and /d/ in other branches. Therefore, the striking coincidence of the Egyptian *tp* “head,” but also “tip” and “on,” with the English “top” and “tip” may not be random but a common preservation of a Nostratic *t'p. In any event, a similar descendent in Greek would have been *dVp. Thus, the Greek **τόπος** (5) cannot be derived from such a root or any other. The basic sense of *topos* is “place, point,” but it has many other meanings. It appears to have a close association with Egypt and is used for districts there. This could come from either *tp* as “chief” or the compound *tp-rd* “plan, rule.” The sense of *topos* as “the theme of a discourse” resembles *tpw-r* “utterance, speech, expression.” The mathematical aspect of *topos* has a precedent in *tp-* “base of a triangle.” The apparently anomalous form **τοπεῖον** (3) “cordage” comes from *tp̄t* “cord, thread.” The strangely parallel semantic clusters found between *tp* and *topos* are too striking to ignore, especially when Chantraine baldly describes the etymology as “unknown.”

A calque confirms that some Greeks were aware that *tp* meant “head” when the Egyptian term for migraine *gs-tp* “half head” was copied into Greek as **ἡμικράνια** “half head.”

Semitic vocabulary

E. Masson and Chantraine do not doubt that the Greek **κάννα**, Mycenaean *kaneja* “reed” derives from the common Semitic root found in the Akkadian *qanu*, Ugaritic *qn*, Phoenician **qn̄** and Hebrew *qāneh* “reed.”⁷⁴ Chantraine goes on to derive from this **κάνων** (H) “straight stick, rule” and “grammatical, artistic, musical and mathematical canon.”

The Semitic etymology of **κόσμος** “to arrange, set in good order, universe” from the Semitic root √qsm was put forward in Chapter 14.⁷⁵

In 1981, Oswald Szemerényi proposed that **ρόμβος** “rhombus,” derived from the Semitic √rb̄ “four” found in the Hebrew *rābū'a*.⁷⁶ He specifically denies the conventional linkage made by Chantraine to **ρέμβομαι** (4) “to wander, turn like a top.”

Conclusion

It often suits thinkers to possess a foreign vocabulary for use in abstract thinking. Intellectually, foreign words lessen distraction from concrete images associated with native words and, socially, they help mystify and confuse those outside the rarified circles of the privileged with knowledge of other languages. Sometimes an arcane ancient language is sufficient for these purposes: Demotic- and Coptic-speaking Egyptians liked to write in Middle Egyptian just as Chinese literati used classical Chinese up to the early twentieth century. After that, the Chinese Nationalist elite used English to serve the same functions. In Europe, Latin and Greek played these roles; first elites wrote in Latin and, later, they larded their vernacular works with classical tags and words. The situation in Ancient Greece seems to have been of this type. From the examples given above, we can see that much of Greek academic or theoretical writing used, if it did not depend on, words of Egyptian and Semitic origin.

CHAPTER 18

RELIGIOUS TERMINOLOGY

Subsequent chapters deal with specific aspects of religion. Chapter 19 is concerned with proper nouns, the names of gods and other mythological figures. Chapter 20 focuses on geographical features. Chapter 21 concentrates on the gods and cults of Sparta and Chapter 22 does the same for Athens. This chapter is restricted to religious terminology under the following headings: sacred structures, personnel, rituals, mourning, paraphernalia, sacrifice, incense, flowers, aura and mysteries. As the Semitic and Egyptian components in this semantic region are approximately equal, they will be treated together, thematically rather than alphabetically.

STRUCTURES

Before considering the structures, we need to consider the surroundings of the sacred place. The Greek **σηκός** (H) is an enclosure in general but also a sacred enclosure around a sanctuary, tomb of a hero or olive grove. Chantraine describes the conventional etymology from a hypothetical Indo-European root *twak as “simply an hypothesis.” The Hebrew *Sûk* or *Sôkâ* means “thorn hedge and the area it encloses.” There are place-names *Sôkô* and *Sôkoh*. The difference between the Hebrew /ô/ and the Greek /ē/ can be seen in the treatment of *sôma* and *séma*; see Chapter 5.¹ **Αυλή** (H) means “surroundings, courtyard.” Chantraine finds

the Armenian *aw-t* “resting place” and *ag-anim* “to spend the night.” He is unable to find any remotely comparable word with an /l/ in Indo-European. The Canaanite $\text{ʔ}ul\dot{a}m$ comes from a Semitic root found in the Akkadian *ellamu* “in front of.” It means “porch” or “altar in front of temple.” The absence of the final -m in *aulē* can be explained by adaptation through the accusative *aulēn*.

Indo-Europeanists derive **βωμός** (H) “platform or altar” from *bainō* “to walk, go.” They relate it to **βῆμα** “tribune,” which they claim derives from *bainō*.² Semitists, however, have long noticed a striking similarity between *bōmos* and the Hebrew *bāmāh* “shrine, high place.”³ They refer to the Ugaritic word *bmt* that appears to mean “back” and the Akkadian *bamatu*, which may signify “mountain ridges.”⁴ John Pairman Brown is skeptical about these supposed cognates and argues that *bmt* is uncertain and *bamatu* does not mean “mountain ridges” but “open plains.”⁵ He, therefore, accepts the Indo-European etymology for *bomos* and derives *bāmāh* from it. He sees it as having been introduced by the biblical Hivites whose name he identifies with Akhai(w)oi Akhaeans.⁶

By contrast, his close friend Saul Levin tentatively derives *bāmāh* and, hence, *bōmos* from a Semitic root $\sqrt{b}nh/y$ “to build” and attacks the Indo-Europeanist view that it is related to *bēma* “platform” and derives from *bainō* “to come, go.” He argues that an altar is precisely what one does not step on.⁷ All in all, it is clear that the two words share a relationship and the likelihood is that it came from the Levant to Greece. The reverse could be true, however, or both could derive from a third language. In such a case, the most likely candidate is Egyptian, in the same way that it provides an origin for the parallel Hebrew and Greek terms *liškāh* and **λέσχη**, which among other things meant “place of rest, tomb.”⁸ The alternation $\bar{e}/\bar{o}$ in *bēma* and *bōmos* also suggests a borrowing from Semitic or Egyptian before and after the Canaanite shift. The only remote possibility of an Egyptian etymology is from *bmbn*, the stone sacred to the sun and associated with the sacred hill of Atum at the creation of the world.⁹ However, I have been unable to find any possible etymon for *bēma* and *bōmos*.

The Semitic origin of *nāos* “temple,” and the Egyptian of *thēsauros* “sanctum, treasury” have been given above.¹⁰ The Afroasiatic root **dud* “pot, cauldron” had a Hebrew form *dūd* and an Aramaic one *dūda*.¹¹ The meaning of **δυτᾱ** (4) is uncertain. Liddell and Scott write “shrine”; Chantraine says “chapel?” or “well.” The likelihood of the last meaning and a derivation from Semitic is that one of the two places where it is

attested is at the Kabeirion at Thebes, with its doubly strong association with Semitic culture.¹²

In the seventeenth century, Samuel Bochart noted the striking parallel between the Hebrew **mə'ārā** "cave" and the Greek **μέγαρα** "sacred pit." Knowing Arabic he appears to have assumed that the Hebrew [>]*ayin* derived from an earlier *ḡayin*.¹³ His inference was confirmed in the twentieth century by the discovery of an Ugaritic form *mḡrt*. Even E. Masson and Chantraine admit that this Semitic etymology is possible.¹⁴ *Megas* "great" has a clear Indo-European etymology. Is this the origin of **μέγαρον** (H) "great hall"? Chantraine resists temptations to associate it with *megas* and grants that it "could be borrowed." He further does not reject the idea that *megara* and *megaron* could be related and borrowed from Semitic.

The opposite of the *megaron* was the **θάλαμος** (H), Linear B *taramata*? Chantraine defines it as "a room in the interior of the house, room of the mistress of the house, and one where provisions or precious objects are enclosed." It was also used for an interior chapel or sanctuary. Both Frisk and Chantraine see possible similarities with *thólos*, a conical tomb or other structure, which itself has no Indo-European etymology. They admit, however, that *thálamos* is equally without one.¹⁵

The Egyptian **t3m** means "cover, cloak, veil." The consonantal structures of **t3m** and *thálamos* fit and the semantic parallels are strengthened by the associations of the Greek term with enclosed women's quarters and marriage and bridal chambers. Aphrodite who had the epiklesis *thalamōn* was sometimes portrayed as wearing a veil.¹⁶

An equally clear Semitic etymology is that of **βαίτυλος** (ICE) "sacred stone dropped from the sky" from the Hebrew Bêt-ēl, Bethel "house of God." Chantraine argues that the etymology is "unknown." He sees it as a "Mediterranean" religious term accepted in both Greek and Semitic and that the notion of "house of God" was merely a folk etymology.

Emily Vermeule wrote in 1979:

These Bronze Age patterns of thought and representation, the tomb as a house for the body, the soul in a new home, the mourning in files and beside the coffin or bier, the *psyche*, the soul-bird and the sphinx-*ker*- were not all developed spontaneously on the Greek mainland, without influence from abroad. The natural source for such influence was Egypt, which had the grandest, most monumental, and the most detailed funerary tradition in the ancient

world. The mechanics of transmitting some of the Egyptian ideas and some physical forms to Greece is not at all clear yet.¹⁷

In this context it is not surprising that the Greek vocabulary of death in all its aspects, and with tombs in particular, was heavily influenced by Egyptian. The derivation of **πυραμῖς** from *p3 mr* “the pyramid” was proposed in Chapter 9.¹⁸ In Chapter 5, I argued that **σῶμα σώματος** “corpse” and **σῆμα/σήματος** “tomb,” both came from the Egyptian *sm3 t3* “unite (with) the earth.”¹⁹ In Volume 2, I discussed the derivation of Labúrinthos from Ny-m3’ t-R’ the prenomen of the pharaoh Amenemhe III for whom the first labyrinth was built.²⁰

The meaning of **πέλτον** is not known precisely but the general sense is clear enough: “base of an altar, tomb, platform for a sarcophagus.” Chantraine sees it as a loan, probably from Anatolia because it was attested there. It can be more plausibly derived from **p3 rdw i*  (O.40) “the stairs, steps, or tomb shaft.” *Rwdw* or *rdwvy* with the same meaning and determinative provides a plausible etymology for **λοίτη** (5CE) “tomb,” and **λοιτεύειν** “to bury.”²¹ Chantraine describes it as cognate to the Old Norse causative of the verb *tīða* “to depart,” *leiða* “to lead, bury.” Both etymologies are possible, but given the greater precision and the parallel with *pélton* the Egyptian is more likely.

Orel and Stolbova reconstruct an Afroasiatic root **kahVp* “hole, cavern.” Given the acknowledged shift *kʷ>t*, they see the Egyptian *ṭḥt* “hole, cavern” as a metathesis of this. The discrepancy is better explained as graphic and the clumsiness of writing **ṭḥpt* in hieroglyphics.²² The word may in fact have become pronounced as *ṭḥt* later *ṭḥt*. Both of these forms appear to have been loaned into Greek. **Θάπτω** (H) is “to bury, hold funerary rites”; **τάφος** (H) is “funeral, tomb,” and **τάφος** (H) is “ditch.” The alternating aspiration fits the uncertainty of *t-/t-* and the position of the */h/*.

Pokorny saw an Indo-European root **dhm̥bh* which he agrees only occurs in Greek and Armenian.²³ The alleged Armenian cognate is *damban, dambaran* “tomb grave.” James Clackson, in *The Linguistic Relationship between Armenian and Greek*, points out that the words only appear in Post-Classical Armenian and that earlier texts used different words. He concludes, “The late and scanty attestation of the Armenian words casts doubt upon the comparison.”²⁴ Hence, there is little reason to suppose that *taphos* ever contained a nasal.

This, of course, is not the case with **τύμβος** (H). Scholars have tended

to distinguish between *taphos* as a hole and *tumbos* as a mound and not to have associated the two.²⁵ *Tumbos* appears to have strong Indo-European roots found in the Latin *tumulus* and the Middle Irish *tomm* and others related in turn to a root for “swell.”

As for *taphos*, the religious reforms of Josiah king of Judah included the desecration of the “Topheth in the Valley of Ben Hinnom, so that no one might make his son or daughter pass through the fire in honour of Molech.”²⁶ The name *tōpet*, Tophet (transcribed with a *φ* in the Septuagint), is isolated in Hebrew and it could well be taken from the Egyptian *tpht* <*tpht* “hole, cavern.”²⁷ The Greek *τέφρα* (H) is “ash, but particularly that of burnt corpses.” Similarly, *thaptō* included funerals with cremation as well as burial. Although such sacrificial burnings may have happened in Egypt, they certainly did not play the central role they did in Canaanite culture. Therefore, the loan is probably from the latter language. Chantraine and other lexicographers derive it from a hypothetical root *dheg^wh found in the Sanskrit *dāhati*, Lithuanian *degù*, Tocharian A *tsāk* etc. Phonetics make it difficult to fit *tephra* into this cluster.

The most detailed description of the term discussed in this section is as “a throne on a raised platform with a canopy.”²⁸ It had generally the determinative  (O40) but there is an instance of its being  (Q2) “seat.” The foundational lexicographers of Ancient Egyptian, Adolph Erman and Hermann Grapow, demonstrated that it was first spelled *tn̄t̄3t* and only later *tn̄t̄3t*. Later scholars have used the latter form. It is a word with many variant writings because of graphic transpositions for elegance that are particularly frequent with signs representing birds.²⁹ Of the eleven examples cited by Faulkner and Lesko, six begin with *t̄3*  (G47) and only four place it after the *t̄/t* n.³⁰ Thus, instead of the awkward *tn̄t̄3t* it would seem simpler to see the first half of *t̄3* as reduplicating the initial *t̄*. Lesko cites a variant *t̄3tn̄*, which, however, involves metathesis and **t̄3nt̄*, would seem more likely. It would also explain the abbreviated synonym *t̄it̄* “dais.” As the semantic match is exact, **t̄3nt̄* would provide a good etymology for *θρόνος* “throne,” which also sometimes had the sense of “dais, platform.”³¹ Chantraine sees two Mycenaean precedents: *tono*, which he equates with *θόρνος*, and *toronowoko* “maker of thrones.” His attempt at an etymology is to attach a suffix -όνος to a supposed Indo-European root **dher* “to support, carry.” More sensibly he links *thronos* to *θρᾶνος* “plank, bench, throne.”

In Late Egyptian *tqs* or *tk̄s* was “to pierce” with an extended meaning

“to pin down, fix.” and from there in the Coptic *tōks* (S) *thōks* (B) “thing firmly fixed, seat.” In Demotic *ths* meant “throne.” Černý describes the resemblance to the Greek **θᾶκος, θῶκος** “chair” as purely accidental. Can we be so sure? Both Frisk and Chantraine provide possible explanations for the alternation qa/qw but make no suggestions as to the etymology itself.

PERSONNEL

Given the Greek association of priests with Egypt it is not surprising that **ἱερός** “sacred” and **ιερεύς** “priest” should have Egyptian etymologies. They are attested early in the Linear B *ȷero*, Dorian **ἱαρός**, Northeast **ἱρός** and *ȷereu*, **ἱαρεύς** etc. The lexicographers make the natural assumption that *hiereús* is *hierós* with the suffix -eus “the one who” deals with the holy.³² It may be, however, that (*h*)*ierós* derives from (*h*)*iereus* rather than the other way round, and -eus or rather -w was present in an Egyptian etymon.

Frisk and Chantraine see (*h*)*ierós* as a crossing of two Indo-European roots: the first *wis “force,” found in the Sanskrit *icxirá* “strength” and another from the “substrate,” found in the Etruscan *aesar* “god.” Thus for them there is no doubt that the original form was unaspirated.

A number of Middle Egyptian words overlap with (*h*)*ierós* in both phonetics and semantics, including **ỉꜣi** “adore, praise” and **ỉꜣw** “adoration,” **ỉꜣt** in Late Egyptian **ỉꜣwt** “office, official.”³³ These may have been contaminated by *iri* “do, act, act as an official” or “celebrate a festival.”³⁴ Then there are **ỉꜣw**, “old man” and **ỉꜣyt** “old woman.” This form would provide a good etymology for *ȷereja* “priestess.” Szemerényi argued, on the basis of this Mycenaean form, that it cannot have derived from *-ew-ya but must have been *-es-ya. He went further and maintained that, therefore, in all cases -eu- was originally *-es-u.³⁵ The original argument on the difficulty of deriving -cja from *-ew-ya is convincing but given a derivation from **ỉꜣyt** there would be no need to postulate an -s- in *ȷereja* let alone for the suffix -eus as a whole.

Another player in the development of **ἀλήτωρ** or **λήτωρ** (5) “priest,” may be **ỉꜣt** “office, function, official, functionary.” In the last chapter, I discussed **ἀλότας**, the title of an Elian functionary, of police and the games.³⁶

The Semitic root found in the Ugaritic **𐎠𐎣𐎰** and the Arabic **ʿadara** “help, succor” became **ʿāzar** in Hebrew, making a Canaanite form a

strong etymon for the Greek **ἄοσσέω** (H) “to aid, bring help.” Chantraine suggests that it may be linked to a meaning of **ῥῥος** (H) properly translated “companion” and from this to **ῥοζος** “servant of a god” from a root $\sqrt{\text{sm}}$ “same.” A Semitic origin for all of these seems more probable.

ζακόρος Mycenaean *dakoro* means “temple servant.” In Arabic, Sabaeen and Ugaritic $\sqrt{\text{dkr}}$ means “man.” The Hebrew *zakûr*, or *zâkâr* signified “a man competent to worship and attend feasts.” Frisk and Chantraine draw a parallel of *zakómos* with the term **νεω-κόρος** (5) “temple attendant.” They see the prefix as either *dia-* “throughout” or *za-*, a mysterious intensifying particle. Could it be that the later *neōkoros* was derived from a folk etymology for *zakóros*?

Ἡβη (H) meant “puberty, youth vigor, pleasure.” It also had a precise sense of the age of 16. Its best-known form with a preposition was **ἔφηβος** “ephebe,” someone who had reached the age of manhood, 18 in Athens. Chantraine writes about the word’s etymology, “Even though the Baltic [form] is distant and . . . there is no other attestation in an Indo-European language, it is not absurd to link it, as is conventional, to the Lithuanian *jegà* and Latvian *jega* [strength].” It would seem far simpler to derive it from the Egyptian **ḥb** “festival, celebration.” The Coptic *hop* “feast, marriage celebration” and to see it as reflecting a ritual around puberty.

Chantraine links the name of Herakles’ wife **Ἡβη** to *hēbē*. It seems more plausible to accept the hypothesis of Paul Kretschmer that the name derives from **Ἡepat**, the wife of the Hurrian God *Tešsub*.³⁷

The Afroasiatic root **koz* means “knot, unite.”³⁸ The Egyptian form $\sqrt{\text{ts}}$ was extremely ramified. Concretely, it meant “knot, cord, fillet wreath” and was the probable origin of **θύσανος** (H) “tassel, fringe.” Chantraine sees a “technical suffix” -ανος but provides no etymology for the stem. I discussed the verb *tassō* (*takh-*) “to range, arrange” in connection with *tšš* in Chapter 8.³⁹ I see it as having been confused with *ts* in the sense of “marshal troops, order and arrange.” *ἱστ*, a “troop, gang of workmen, requisitioned labor” or “people,” was discussed in the last chapter.⁴⁰ With different writing it may have meant “station in life.” This provides an etymology for **θήης-θητός** (H) “salaried worker,” although sometimes the word means “slave.”

As argued in Chapter 5, *tsw* “commander, protector of the poor” was borrowed into Greek as **Θησεύς**, Theseus the “national” hero and organizer of Athens.⁴¹

ἱς was also employed in a specific religious sense of “arrange rites.”

This may well be the origin of the verb **θύω** in the sense “to make religious offerings.” Frisk and Chantraine see it as cognate with the Sanskrit *dhūma* and the Latin *fūmus* “smoke.” They have constructed a root *dhw-ṛ in which the -m is a suffix. They maintain that all the early uses of the verb refer to burnt offerings and only later was it employed more generally for all kinds of sacrifices, offerings and even celebrations. As burnt offerings were the sacrifices of choice in the Homeric epics, it is difficult to be certain about this assertion.

We shall now turn to another meaning of *thyō*, one that is generally considered to be distinct but which I believe to be related. The general sense of *ty* is “to knot together, unite,” just as “bind” is “bound” to “band.” The Greek **θίασος** (5) “a group, or religious community” was particularly associated with the cult of Dionysos and with the wild Thuiāi, Thuiādes, Mainads or Bakchai. As Michael Astour has shown, the Bakchai derive their name from the Semitic root $\sqrt{\text{bky}}$ “weep, wail.”⁴² Here there is a parallel with the Late Egyptian *ṯsw* “female mourner, one of a band?” The Thuiāi and Thuiādes belong to a word cluster generally seen under the verb **θύω** in the sense of “rush wildly with fury.” Chantraine sees the derived form **θύων** as the result of a present infix -n- but other derivatives, such as those with an -i-, lead him to conclude that there was a Greek theme **θυσ-**, which brings us back to *ty* and the strong possibility that, through it, the two meanings of *thyō* can be brought together.

Neither Bomhard nor Dolgopolsky list the root *k’at’ *k’ut’ in Nostratic. This is probably because it breaks the rule in Indo-European that no two glottalized consonants can occur in the same root.⁴³ Exceptions always exist, however, especially when they may be influenced by onomatopoeia. In any event, it is difficult to attribute the Scandinavian *kutte*, English “cut” to the French *couteau* “knife.” The root qat/quṭ “cut” is well established in Afroasiatic.⁴⁴ Even beyond Nostratic it has become a favorite of global etymologists. It is found in Nilo-Saharan and Niger Congo *kut, as well as in the Archaic Chinese *kat and Vietnamese *cat*.⁴⁵ Within Afroasiatic, the /ṭ/t became /ṣ/ in Canaanite and Aramaic. Thus, the biliteral $\sqrt{\text{qṣ}}$ with a number of different finals signifies “cut, break off” and the thing cut or broken off as “end, extremity.” For instance, the Semitic root $\sqrt{\text{qṣb}}$ is found in the Aramaic *qaṣāb* “butcher.” This provides a plausible etymology for **κοσῦβ(άτ)ᾱς**, the title of a sacrificer at Gortina. Chantraine finds the word “obscure” but possibly derived from

κοσύμβη (3) “fringe or shaggy coat,” the functionary could have been wearing. On the other hand, $\sqrt{q\dot{s}b}$ means “to cut off” and specifically “to shear sheep” but it also was used to mean “extremity.” Thus *qasâb* and the later Hebrew *qâšab* provide strong etymologies for both *kosub(át)ās* and *kosumbē*.

CULT OBJECTS

The Egyptian origin of a number of these—**Ἀνακτόριον** and **Ἀθήρ**—has been discussed above.⁴⁶ We will return to them at the end of this chapter, in the section on the Eleusinian Mysteries where we will also discuss **κάλαθος** and **κίστη**.

The Semitic root $\sqrt{bl}$ is “to mix, alloy.” The Hebrew *bālal* “to mix with oil,” a sacrificial term, is only attested in the Piel causative conjugation **bilēl**. This is a plausible etymon for **φιάλη** or **φιέλη** *piā₂ra* “flat basin for warming liquid.” Chantraine writes, “probably a borrowing.”

In 1928 Heinrich Lewy proposed that the Later Hebrew **golēl** “a stone placed on top of a burial cave” was the origin of **γύλλος** (Hskh) “four-cornered stone carried on processions for Apollo.”⁴⁷ Chantraine merely writes “Mediterranean.”

Both Michael Astour and John Pairman Brown have shown in detail that the **θύρσος** (5) “staff entwined with ivy and vine, associated with Bacchic rituals,” derived from a West Semitic word *tirōš* “sweet wine,” also meaning “vine stock.” This apparently gives us **τρύξ** “sweet wine.”⁴⁸ Chantraine sees *thyrsos* as a loan, probably from the hieroglyphic Hittite *tuwarsa* “vine stock.” Whether or not this was the source of the Greek term, Astour has argued that the Late Hittite word itself came from Semitic, a *tiq₂tal* form of $\sqrt{yrš}$ “trample down.”

Szemerényi plausibly derives the Greek **κτέρας** (H) “present< offering to the dead” from the Semitic root found in the Akkadian **kiteru** as in the term *ina kiteru* “give a grant.”⁴⁹

Ἡρ is one of the many Egyptian synonyms for “tomb, necropolis.” This fits well with **χηλός** (H) “coffer, sarcophagus.” Chantraine provides no clear etymology.

The Egyptian **swʒh** is “to make to endure, last long.” This provides the solution to the double meaning of **σορός** (H) “funerary urn, sarcophagus” and “old man or woman.” Chantraine relates *soros* to the Lithuanian *tveriu* “to surround, seize.”

RITUALS

The basic sense of **wḥm** Coptic *ouohm* (SB) *ouōhem* (B) is “to repeat.” It has, however, extended meanings of “to explain, interpret, announce, chant.” *Wḥmyt* is thought to mean “continued howling.” This is a persuasive etymon for οἶμη (H) “chant, poem, recital.” On the basis of the composite form φοοίμιον, προοίμιον is more common. Chantraine argues that it was originally aspirated. This better fits the etymology made by other scholars from a root found in the Old Norse *seidr* “magic” and the Sanskrit *sāman* “chant.” Chantraine does not commit himself.

Wḥm also provides an etymology for ὀμφή (H) “divine voice, chant.” Chantraine describes it as an “old isolated word.” He sees it as deriving from a hypothetical *song^{wa}, related to the Gothic *saggws* “chant, music” and the general Germanic “to sing.” This is possible, despite slight difficulties with vocalization and the lack of aspiration of *omphē*. Nevertheless it is much more cumbersome than the Egyptian etymology.

With some uncertainty, Chantraine sets out the following possible Indo-European cognates for ἄρά (H) “to pray, vow, curse”: the Armenian *uranam* “to deny,” the Hittite *ariya-* “to question an oracle” and the Latin *orō* “to pray.” The Egyptian *iri* had the sense “to recite a spell, swear an oath, celebrate a festival.” In Coptic different forms in different dialects had different vocalizations.⁵⁰ These could explain the Hittite, Latin and Greek etymologies.

Ἰακχος was a ritual cry invoking Dionysos at Eleusis and Athens. Chantraine tries to link it to ἡχή “noise.” In her *Prolegomena to the Study of Greek Religion* Jane Harrison wrote, “How many people attach any precise significance to the thrice repeated . . . Alleluia, Alleluia, Alleluia? . . . They are a homage beyond articulate speech . . . ‘the Iacchos’ was a ritual cry, one easily recognized by an Athenian just as nowadays we should recognize Alleluia and Hosanna.”⁵¹ Michael Astour comments on this passage that in Hebrew *Alleluia* and *Hosanna* had very specific meanings. In the case of *Iakkhos*, he writes that the vocative *iakkhe* corresponds well to the Piel imperative of the verb *nky* “to strike” which is *yakke* “to strike, kill.”⁵² This meaning fits well with the Dionysian ritual in which it was shouted.

Ελευθερος—*ereutero*—“liberty” in Homer had the sense of ἐλεύθερον ἡμαρ “day of ‘freedom,’” or κρητήρα ἐλεύθερον “drinking bowl of freedom.” It appears initially to have been a temporary state associated with

a festival and drinking. In this way it resembles the Latin *libertās*, which is clearly derived from the Italic god *Līber*, who was seen as the equivalent of Dionysos and Bakkhos, the gods of orgies and drinking. Naturally, scholars have tried to link *eleutheros* with *līber* and have found possible intermediate forms *loufir* and *loferta* from other Italic languages. They have also attempted to link it to the Germanic and Slav *liut* “people” and to a possible Indo-European root for “to grow, swell” found in the Sanskrit *rudh-*.⁵³ Chantraine is dissatisfied with all of these. An alternative suggestion is that *eleutheros* could derive from *ir(t)* ḥꜣwt, a form attested in Late Egyptian meaning “to celebrate, keep festival.”

If this etymology is uncertain, that of the Latin *Līber* and *līber* is more clear. The Egyptian **rmi/w**, Coptic *rime* (S) *rimi* (B) “to weep” is reconstructed by Vycichl as **rimi*. The initial r- derives from an Afroasiatic /l/ indicating that without an Egyptian letter “l” the pronunciation was probably **limi*.⁵⁴ This provides a suitable origin for **λείβω** (H) “to pour drop by drop, notably of tears, honey, oil or wine” and **εἴβω** (H) “to shed tears.” *Leibō* is, of course, cognate to the Latin *libō* “to make a libation.”⁵⁵ **Rmw** with the personal suffix -w is “weeper” in Egyptian. Similarly, *Līber*, also written *Leiber*, had the personal suffix -er. *Līber* was assimilated with Bakkhos, *bākūy* “bewailed” in Western Semitic. As Astour points out “weeping for dying gods was the essential rite of their [south-west Asian] liturgy.” The Book of Ezekiel refers to women wailing for Tammuz at the northern gate of the temple at Jerusalem.⁵⁶ In a partially secularized and masculinized version this survives today as the Wailing Wall. Astour’s case is clinched by the close association of Bakkhos with Pentheus whose name comes from the verb **πενθέω** (H) “to be in mourning, bewail a dead person.” In Chapter 10 I tentatively proposed an origin from the Egyptian bꜣ ntr.⁵⁷

As the poet and scholar Gail Holst-Warhaft has shown, mourning is a period when people, especially women, can express themselves freely, noisily and wildly because in this agony they lose fear.⁵⁸ The Bible records the story of Jephthah who, when forced by a vow to sacrifice his daughter, granted her wish: “to roam in the hills with my companions to mourn that I must die a virgin . . . it became a tradition that the daughters of Israel should go year by year and commemorate the fate of Jephthah’s daughter four days in every year.”⁵⁹ In Greece there were the bloody dramas of the Bakkhai, wild women roaming the hills free in their wailing concerned with Pentheus and Bakkhos. Thus *libertās* like *eleutheros*,

was initially associated with license and the possibility of temporary freedom in mourning, or its routinized commemoration, and drunken festivals.

Egyptian women were famous for their passionate mourning.⁶⁰ The standard Egyptian term for this was **ỉkb**; it was written with the determinative 𓆎 (D3) “hair.” The derivation from “tearing the hair,” is made clear by the determinative of a woman tearing her hair for **ỉkbyt** “mourning woman.” This provides a good source for **ἐλεγαίνω** (6) “wild, wrathful, wanton.” The etymology has to be early because already in Late Egyptian it was being written as *ikb*. This presents a slight difficulty in that we do not know when /b/ became a fricative and thus likely to disappear. **Ἔλεγος** was a “song of mourning.” The diminution of women’s rights brought an attempt to tame mourning and to have it controlled by men in the **ἐλεγεῖον** “elegy,” spoken in a male voice. None of these words have an Indo-European etymology.

The derivation of the suffix **-μβος** “dance, sing” from the Egyptian **ib3** “intoxicated dance” was set out in Chapter 15.⁶¹

In Chapter 15 I discussed the origins of **ἑρανος** (H) “a religious feast to which everyone brings a portion,” from **ỉm** “to bind for sacrifice” **ỉm n** “to offer to” and **ἑορτή** (H) “festival” and **ἑορτικός** “offerings given at festivals” from **h3w ht** “special offering” or **h3w-hr ht** “abundance of offerings.”⁶²

Orel and Stolbova list a root *seb “flow, pour” found in Semitic and East Chadic.⁶³ Although not included, the Egyptian **sbt** “libation jar” is a likely member of this family. It provides a reasonable etymon for **σπένδω** (H) “make a libation.” Chantraine finds Indo-European cognates in only two other languages: the Hittite *sipand* “to make a libation” and the Latin *spondeō* “guarantee.” All three could be borrowings from Afroasiatic.

Στήνια (4) were the crude insults women hurled at each other on the third day before the Thesmophoria. Chantraine sees the etymology as obscure. The obscurity is cleared by considering the two hapakes in the Bible: **śitnāh** “accusation,” **śit)nāh** “hostility,” **śātan** “to act as an adversary.” Of course, there is **śātān** “The Adversary” rendered **Σατάν** as a loan and **Διαβόλος** as a calque.

S(3)t was “to make libation, pour out”; **στάζω** (H) is “to pour out drop by drop.” Chantraine rejects previous attempts to find Indo-European etyma. He sees **σταλάσσω** (6) “drip” as an expressive form of *stazō*. Clearly, *-asō* is a suffix but **stal* could be a metathesis ***st**?

SACRIFICES

Ἄγαιος, a sacrificial epithet in the regulations of the Labyad phratry at Delphi, have been discussed above, as has Αἴγλη with a general meaning of “radiance.” The latter was also the specific name of a sacrifice at Delphi.⁶⁴

The derivation of οὐλαί (H) “grains of barley put on head of sacrifice,” from the Egyptian wʒi “roasted? grains” and that of ἀνχίν “neck of men or animals” from wšn “wring the neck of poultry” were discussed above.⁶⁵

Mwy(t) Demotic *mʒt* Coptic *mē* “urine, spittle, sometimes excrement” is a plausible etymon for **μαινω** (H) “soiled by blood spilled” and **μύσος** (5) “soiled, sacrilege.” Chantraine has no explanation.

Chapter 15 also contained a discussion of the derivations of **μᾶνης** “a sort of cup,” **ἀρνίον** “a vase to receive the blood of sacrifice” and **μῶϊον** “box jar” from **mnī** “jar.”⁶⁶

The Hebrew **mûm** or **mʾûm** means “flaw or blemish in a woman or sacrificial animal.” The Greek **μῶμος** (H) is “criticism, defect or fault.”⁶⁷ There is a late but striking structural parallel to the correspondence *mûm*/*mōmos* in the Canaanite **mûq** and the Greek **μῶκος** (4) “mock,” which has no Indo-European etymology.

Chantraine sharply distinguishes *mōmos* and its derivatives from **μέμφομαι** (H) “blame, reproach” because *mōmos* is not merely concerned with the criticism but with the flaw itself. The discrimination seems to me too refined. In any event, Chantraine considers the Indo-European etymology for *mémphomai* linking it to the Gothic *bimampian* “insult, to be doubtful.” Saul Levin argues that both the Semitic and the Greek words must be borrowed from a third language because “neither IE nor Semitic has verbal roots that consist of the same consonant pronounced twice.”⁶⁸ This may be true but there are many Semitic nouns with this structure: the Arabic *bab* “gate,” the Canaanite *gâg* “roof,” *dad* “breast” and the fundamental *layil*, *lailâh* “night.” Thus *mûm* as a noun would seem perfectly permissible in Semitic.

The Greek **ῥσιος** (H) was “sanctioned by divine law.” *Hosiôtēr* was a “perfect animal fit for sacrifice.” The *Hosíoi* were priests at Delphi who were concerned with such animals and *hosioō* was “to consecrate, purify.” Jane Harrison considered this word and the cluster around it as central to Orphism and later Greek religion. She wrote about these terms, “The animal thus consecrated was called *Hosioter* which means “he who

consecrated.” We should expect such a name to be applied to the consecrating priest rather than the victim. . . . We can only explain Hosioter on the supposition that the sacrificial victim was regarded as an incarnation of the god. If the victim was a bull. . . .”⁶⁹

Pokorny, following Brugmann, derives *hos-* from the Indo-European **es* “to be.” Frisk and Chantraine find this “unpersuasive.” A much more precise etymology on both phonetic and semantic grounds is from the Egyptian verbs *hsi* “to sing,” and *hs(z)i* “to praise.”⁷⁰ Kurt Sethe and Jaroslav Černý made a sharp distinction between the two roots, because of their voiced and unvoiced sibilants.⁷¹ Given the slight phonetic difference and the worldwide association between singing and praise, I find it hard to imagine that the two are unrelated. In any event they were treated as one in Late Egyptian. The Coptic form *hōs* is “to sing, make music, praise.” This with the final *-i*, found in the earlier forms provides a good etymology for *hōsios*.⁷²

Still more interesting is the Egyptian *hsy*, the Coptic *hasie* or *esie* “drowned or praised person.” The latter was recorded in Greek as Ἑσιῆς “Egyptian for praised dead.”⁷³ An alternative version of the Osiris myth has him not struck down by Seth but drowned by him. Incidentally, this tradition was central to the “mysterious” drowning of Hadrian’s lover Antinoos.⁷⁴ The tradition is clearly very ancient and is linked to Osiris’ identification with the Nile flood, which is attested in the *Pyramid Texts*.⁷⁵ In Ptolemaic times this aspect of the god was linked to his incarnation as the Apis Bull.⁷⁶ Thus, *hasie* “the praised one” almost certainly referred to Osiris and the Delphic *hosiōtēr*, Harrison’s “sacrificial victim regarded as the reincarnation of the god” usually a bull. Elsewhere, Plutarch mentioned the bull-shaped images of Dionysos.⁷⁷ The idea of a Hellenized Osiran bull cult at Delphi should not be dismissed out of hand. The second-century (CE) novelist Heliodoros was describing the curiosity of Delphic priests when he wrote: “Everything relating to that country [Egypt] has a special charm for the Greeks.”⁷⁸

The Semitic root $\sqrt{\text{rt}}$ preserved as such in Ugaritic, signified “terror, to terrify.” In Hebrew it became $\sqrt{\text{rs}}$. It was loaned into Egyptian as ***ōrit** **u**.⁷⁹ Either this or its Semitic prototype provides a good etymology for **ὄρεχθέω** (H) the “bellowing or palpitating of sacrificed bulls”; the /khth/ represents the complex Semitic / t_h /. Chantraine denies any association with **ῥοχθέω** (H) “to bellow, moo.” He lists some “expressive terms for noise” ῥόθος, ῥοῖζος and ῥοῖβδος and then some with similar finals βρόχθος and μόχθος. None of these, he states, have etymologies.

This does indeed seem like a good example of the “phonesthemics” or semantic associations with sounds, discussed in Chapter 1.⁸⁰ Nevertheless, the existence of *ōriṭu suggests that *orekhtheō* and *rokhtheō* are at the core of the cluster.

Jernstedt suggested that a hypothetical combination ***st rqh(t)** (Coptic *ṛōkh* or *rekh*) “place of burning” provided an etymon for **ἐσχάρᾱ** (H) “low hearth for sacrifice.” In the complete absence of an alternative, Jernstedt’s hypothesis is plausible.⁸¹

I have already discussed the derivations of **βασυνίας** “cake associated with sacrifice” from ***p3/snw** “food offerings”; **λιβρός** the “dark blood of sacrifice” from **leibō** “to pour” and **rmi** “to weep”; **σφάζω** “sacrifice by cutting the throat” from **√spk** “trickle water, shed blood” and **θοίνῃ** “festival following sacrifice,” from **dnit** “festival.”⁸²

INCENSE, FLOWERS, SCENTS

Ἄνθος and other derivations from **ntr** were discussed in Chapter 10 as was **ξάνθος** “fragrance” from **sntr**.⁸³ For the Semitic origins of **ληδανον** “laudanum” and **μύρρα** “myrrh,” see Chapter 14.⁸⁴ For **νέκταρ** see Chapter 11.⁸⁵

AURA

This vague concept covers a number of terms with plausible Afroasiatic etymologies that were considered in previous chapters: **φοῖβος**, **ἄνθος**, **ξάνθος**, **καθαρός** and **κῦδος**.⁸⁶ The Canaanite *hāḡāh* means “to remove dross or impurities or impure people.” **Ἄγος** (5) is “consecration, a religious interdict that strikes the guilty.” The lexicographers are naturally intrigued by the apparently close parallels with **ἅγιος** (5) “sacred,” **ἄζομαι** (H) “to experience religious awe” and **ἄγνος** (H), and **Ἀγαιος**.

S3h is a causative of the verb **3h** “to become a spirit” and the adjective “glorious, splendid.” **S3h** itself is “to glorify [a god], beautify [a tomb].” This provides a strong etymology for the Greek **σέλας** (H) “flash, brilliant light.” As Chantraine points out, the origin of this word like all others beginning with s- is “ambiguous.” He dismisses the proposals listed by Frisk.

Frisk and Chantraine agree that **σελήνη** (H) “moon” derives from *selas*.

These two terms are close to the Hebrew *hāḡîn* or Aramaic *hāḡan*

“suitable, worthy.”⁸⁷ Chantraine would like to link them all to the Latin *sacer* though he is troubled by the lack of aspiration of *ágos*. The weakness of the Canaanite /h/, as opposed to /h̥/, would explain the alternation of aspiration in Greek. Ernout and Meillet are less interested in the relation between *sacer* and *háẓomai* than they are between the former and *sānctum*. They see the /n/ as an infix. If *sānctum* is the base form rather than merely the past participle of *sancīō* it would seem more plausible to derive it from sntr/xánthos than from the mysterious *sacer*. Ernout and Meillet conclude their lemma on *sancīō*:

The linking of the Greek words with the Indo-Iranian family and the Sanskrit *yájati* “he sacrifices” is not good for either the form or the sense. Anyhow the Latin *sancīō*, the Gothic *sakan* and the Greek ἅζομαι do not possess precise enough parallels of sense or form to authorize an affirmation. It is curious that no word for the concept of sacred is attested throughout Indo-European. The strictly religious vocabulary varies greatly from one Indo-European language to another.

In the case of Greek this can be plausibly explained by the borrowings in this semantic field from Afroasiatic languages. It seems reasonable therefore to propose a Canaanite origin for the Greek *ágos*, *hágios*, *hágios* and *háẓomai*.

The name **Στύξ** Styx, the river of death, applied to a cold stream in Arkadia, came from the verb **στυγέω** (H) “to be horrified, revolted” and the adjective **στυγνός** “hateful, abominable.” **Stkn**, a causative of *tkn* “approach” developed the specific sense of “to induct, bring on gloom, execute.” The Egyptian source is much more plausible than Chantraine’s link to the Russian *stýgnuti* “to refresh, freeze.”⁸⁸

The Egyptian **šps(s)** “noble, splendid, august” was frequently used as an epithet for gods and provides a plausible etymology for **σέβομαι** (H) “show a respectful fear” or a “religious respect, usually of the gods.”⁸⁹ Accepting the Egyptian etymology would mean that what the lexicographers see as a derived noun **σέβας** (H) “religious respect, adoration.” Coming from this is the verb with an aorist form **σεβάσασατο** (H). The adjective **εὐσεβής** “pious, respectful of the gods and their laws” should also be seen as preserving an original -s. A derived form **σεμνός** from ***σεβνός** “venerable, who inspires religious respect mixed with fear” was used of many divinities, especially Demeter and the Furies. It is interesting in this respect that *šps* only survived into Coptic in the feminine form

šapši from the earlier *špst* “noble lady.”⁹⁰ The Coptic vocalization stressed /á/ indicates a stressed /é/ in Late Egyptian.⁹¹ Following a tradition going back to Brugmann, Chantraine sees the basic meaning as “retiring,” and, therefore, the form as cognate with the Sanskrit *tyájati* “to leave, abandon.” Not surprisingly, Hjalmar Frisk and the very sensible lexicographer of Sanskrit, Manfred Mayrhofer, have their doubts.

Another later derivative of *šps* with the vocalization -a- would seem to be the divine epithet *Σαβάκιος* or *Σαβος*. In Phrygia, Zeus Sabazios was worshipped. In Thrace the epiklesis was attached to Dionysos. In the early twentieth century, A. B. Cook saw parallels between the Libyan Zeus Asbystes and Sabazios in Phrygia and Thrace. On this and a number of other grounds, he proposed a Thrako-Phrygio-Lybian substratum.⁹² As argued above, there were clear contacts between Egypt and the Northern Aegean before the region was penetrated by Greek culture.⁹³

MYSTERIES

W3g and 'opγ-

The Egyptian **w3g** meant “to shout” and “a religious festival.”⁹⁴ **W3g** is clearly related through palatalization to **w3d** “green, make green, flourish” applied to the Delta after the flood. The term was encountered in Chapter 9 in connection with **Pr w3dyt** Aphrodite.⁹⁵

The Greek cluster of words beginning with **'opγ-** covers a remarkably similar semantic field. **'Opγῆ** (H) “passion, anger, temperament,” especially “the changeable moods of women.” Another use of *orgē* is found in a hapax that appears to mean, “sacred land.” **'Opγᾶω** (5) “to be full of sap or vigor” is said of fertile land or growing plants. **'Opγᾶς** was “well-watered but generally not cultivated land” and **ἡ 'Opγᾶς** “the Orgas” was a stretch of fertile, but unworked, land around Eleusis. This land was sacred to Demeter and otherwise known as the Rharian plain; the possible derivation of this form from **r-3ht** was mentioned in Chapter 9.⁹⁶ Conventionally *orgē*, *orgaō* and *orgas* are supposed to be cognate to the Sanskrit, **ūrjā** “food, vigor.” Chantraine claims that there is a parallel to the developed meaning of “anger” in the Irish *ferc*. He admits, however, that Szemerényi has produced strong arguments against the derivation from **ūrjā**.⁹⁷ On the other hand, Chantraine considers as “risky” Szemerényi’s etymology of *orgē* from **ὀρέγω** “to stretch out one’s arms, desire.”

In short, Indo-Europeanists are very uncertain about this issue. The Egyptian etymology is not only tighter in both semantics and phonetics, but it encompasses the wide range of meanings of the Greek stem.

Ὀργια (6) were religious rites, found particularly in the mysteries of Demeter and other divinities, all with orgiastic aspects. The ancients recognized the close similarities with *orgē* in both sound and meaning, but Frisk and Chantraine derive it from a completely different Indo-European root **werg* “work.” While this does undoubtedly have Greek cognates in ὄργανον “instrument” ἔργον and ἔρδω “work,” to include *orgia* in this cluster is far-fetched in both phonetics and semantics. It should clearly be related to *orgē*. Finally, ὄργον “a member of an Athenian religious association” should also be placed with *orgē* with its Attic and Eleusinian connections.

The similarities between *orgē* and *orgia*, on the one hand, and W3g on the other are brought out in a description of the Egyptian festival:

The W3g festival celebrated on the seventeenth day of the first month of the flood was given over to drinking in honor of the god and it is certain that the wine here was placed in relation to the fertilizing water of the Nile. . . . Osiris was represented under a kiosk adorned with vine leaves and sheltered by a vine. It can be concluded that the wine . . . had a mystic sense. . . . It is the liquor of immortality given by Osiris to revive the dead.⁹⁸

The erudite Nonnos described a feast held by Dionysos after the death of Staphylos, whose name can be translated as “grape,” and the latter’s revival in his son Botrys “bunch of grapes.” He drew parallels with this both to the cult at Eleusis and to Ὑακίνθια at Amyklai.⁹⁹ The etymology of Hyakinthia from **W3g ntr* after /3/ had lost its consonantal force is discussed in Chapter 21.¹⁰⁰

Mysteries are by definition mysterious and are seldom if ever described directly. The only two detailed descriptions of Egyptian initiations available to contemporary scholars come from the Roman period. The first is contained in a description in the Latin novel *The Golden Ass*, written by the North African author Apuleius. It deals with the initiation of the hero Lucius to the goddess Isis that took place in Greece. In her critique of my belief in the Egyptian foundation of much of the Greek mystery system, Mary Lefkowitz agrees that there were “Egyptian elements in Apuleius’s ritual.” She continues, “But there is a characteristic difference

in timing: Lucius is initiated while alive; the Egyptian reciter of the scroll will be allowed to cross the threshold after his death.”¹⁰¹

Against this widely held view, the German Egyptologist and historian of memory Jan Assmann wrote an important article entitled “Death and Initiation in the Funerary Religion of Ancient Egypt.” After a survey of Pharaonic texts and Apuleius’ description of Lucius’ initiation to Isis, Assmann begins the conclusion of this essay:

No one doubts that the initiation rites of the Isis Mysteries, as Apuleius describes them, are deeply rooted in the elaborated rituals and conceptions of Egyptian funerary religion. The same holds true for other initiation rituals. Seen from this aspect, a relationship between death and initiation is not disputed. A number of clues listed in this survey, however, have given us reason to look in the opposite direction. Let us attempt to formulate our results into a hypothesis: the funerary rites take the form of an “initiation into the mysteries of the underworld” . . . because they reflect the corresponding rites and conceptions of cultic rituals in “this” world, of which, for obvious reasons, we know next to nothing.¹⁰²

I do not go as far as Assmann in claiming that funerary rites were based on initiations of the living. Ancient Egyptian initiations and funerary directions, however, were clearly very closely related and the sharp distinction made between the Greek living initiate and the Egyptian dead soul vanishes.¹⁰³

The second detailed ancient report of a mysterious initiation comes in a papyrus in the cursive Egyptian script Hieratic that describes the initiations of a priest named Horsiesis. The initiation took place in the ancient cult centers of Abydos, Busiris and Karnak.¹⁰⁴ The rituals described by Apuleius and Horsiesis share three striking features. First, they appear to be based entirely on Egyptian tradition. Second, many of the passages resemble those found in the *Book of the Dead* or, to use its original title, *Going Forth by Day*. Third, they resemble descriptions of many of the rituals practiced in the most famous Greek mysteries, those at Eleusis, northwest of Athens.

The skeptical scholar Gwyn Griffiths attempted to reconcile the three parallels. He maintained that the essential theme of spiritual regeneration in the present life was specifically Greek and Eleusinian. Nevertheless, he added, “Yet this may have developed in the Hellenistic era in

Egypt as a development and projection of a very ancient funerary tradition.”¹⁰⁵ His position seemed to be that the Greeks and late Egyptians both independently invented spiritual initiations for the living that resembled the journeys of the souls of the dead. A widespread “Egyptomaniac” fantasy that the Greek mysteries had been developed from Egyptian ones then confused the situation and the Greek mysteries were fleshed out by the introduction of some Egyptian ritual. This seems much more cumbersome than simply accepting the ancients’ view, that the Greek mysterious initiations were derived from Egypt.

At least at a superficial level, the mystery and initiations in the cult of Demeter at Eleusis resembled those of Osiris at Abydos and other holy centers in Egypt. Furthermore, Egyptian scarabs and a symbol of Isis—Demeter was her Greek counterpart—were found in a ninth- or eighth-century BCE tomb at Eleusis.¹⁰⁶ For these reasons, although the majority of classicists deny it, a number of the most distinguished specialists of the twentieth century CE have followed the predominant ancient tradition that the cult of Demeter was imported to Eleusis from Egypt before the Trojan War or during what we now call the Late Bronze Age. Most notable of these was the French classicist Paul Foucart, who dominated Eleusinian studies in the early part of the twentieth century and whose detailed work is still respected, even by the most conventional.¹⁰⁷ A later French ancient historian, G. Charles-Picard, is generally supposed to have refuted Foucart. Even he, however, admitted that “well before” the eighth century BCE, the Eleusinian Mysteries were substantially influenced by Egypt.¹⁰⁸ In 1971, the British scholar A. A. Barb also saw fundamental connections.¹⁰⁹ The firm isolationist Jean Hani admitted, when referring to Isis and Demeter, “it seems that there has always been a type of ‘understanding’ between Greece and Egypt since prehistory.”¹¹⁰

Beyond the evidence from Apuleius and Horsiesis, there is the mysterious underground Cenotaph of Seti the First (c.1309–1291 BCE) or *Oseirion*. This structure contains complex passages inscribed with broken hieroglyphs and sections of the *Book of the Dead*, a strange underground island and a hall decorated with the text of a mysterious religious play.¹¹¹ This place could plausibly be used for initiations.

In addition, passages going back to the seventeenth century BCE refer to men who, though alive, were called *m3' hrw* “true of voice,” the title generally applied to the immortal dead.¹¹² There is even one from a man who claimed to have taken part in a ritual described in *Going Forth by Day*.¹¹³ Thus, a substantial body of evidence backs Assmann’s contention

that funerary instructions closely resembled initiations of the living and specifically that *Going Forth by Day* was sometimes used for such initiations. This evidence also supports the ancient view that the Greek mysteries and the initiations associated with them derived from Egypt.

Now to consider the word **μυστήριον** (6) itself. The Indo-European root *mū means “to close the lips” or stay “mute.” It was reconstructed to explain the Greek μῦω “keep silent.”¹¹⁴ Keeping silence is certainly an important aspect of mysteries, but this proposed etymology only explains the first syllable of the term. It would seem more plausible to follow the nineteenth-century scholars Jacob Levy and Otto Keller who derived it from the Semitic root √str “cover, veil, hide.” As Keller suggested, it is possibly the Canaanite Hophal participle *mastār “caused to be hidden.”¹¹⁵ It is an argument against Keller’s specific proposal that if *mystērion* comes from Semitic it is more likely to derive from √str with the nominalizing or localizing prefix *m-*. This is attested in the Hebrew *mastêr* “hiding, the act of hiding,” *mistôr* “place of hiding, shelter,” *mistâr* “secret place, hiding place.”

The challenge to the Indo-European origin of such a central element in Greek culture caused some anxiety among supporters of the Aryan Model. For an example, see the bullying statement by the nineteenth-century German Semitist, H. L. Fleischer, “With the indubitably pure Greek origin of the words μύστις and μυστήριον from μύεω (μύω), μύζω, it would be better to stop even the mere suggestion of the origin, sometimes sought, of these words from *str*.”¹¹⁶

In a less “Aryanist” age we can look at other forms of the Semitic *str*. With the prefix *hi-* of the hiphil perfect *histôr* or the Niphal construct infinitive *hisater* “to be hid, concealed”; *str* would explain the title ὕσθηρια given to a festival of Aphrodite in Argos.¹¹⁷ Furthermore, although possibly confused with the Indo-European root *udero “belly,” ὕστέρα “womb” is more plausibly derived on phonetic grounds from *histôr* or *hisater* “hidden.” The Hebrew noun *sêter* was used specifically to refer to “womb.”¹¹⁸ A connection with the passions of the mysteries provides a better explanation for ὕστερικὸς “hysteric” than does the folk etymology of the alleged wanderings of the womb. The Latin *histerio* “actor” is supposed to come from the Etruscan. Whether this is the case or whether it came directly from Phoenician, the connections between mysteries and drama qualify it for this cluster.¹¹⁹

While the words with initial *hi-* clearly come from Canaanite the origins of *mystērion* are not so clear-cut. According to the specialist on

Egyptian religion S. Mayassis, the word comes from the Egyptian root $\sqrt{\text{st}3}$.¹²⁰ This is, of course, cognate to $\sqrt{\text{str}}$, as is the nominalizing and localizing prefix *m-*. However, *m-* also occurred independently as the locative preposition. Thus *m st3* “in secret” is attested.¹²¹ The causative *sst3* was central to the Osiran “mystery” cult.¹²²

The derivation of Greek borrowings from *hi-str* from West Semitic suggests that *mysterion* too came from that language. Nevertheless, the overwhelming literary and other evidence connecting the Greek mysteries to Egypt rather than the Levant indicates strongly that it came from *mst3*.

Connections with Egypt can also be found in the special vocabulary. Some of this vocabulary has been discussed in earlier chapters: the *Anaktórion*, from nh , “small chamber at Eleusis containing the *hierá* “sacred objects” from *i3yt* and the *athér* “ear of wheat, in Egypt sacred to Osiris,” from *ntr*.¹²³ Then there is the possibility that *páx* the cry at the moment of initiation derives from *bs* “initiate.”¹²⁴ *Τελετή* “initiation into the mysteries,” came from the root *tel-* and the Egyptian *(r)dr*.¹²⁵

Two other terms central to the Eleusinian mysteries, *κάλαθος* (5) and *κίστη* (H), also have plausible Egyptian etymologies. Émile Chassinat discussed the rites described at the Ptolemaic temple at Denderah, apparently a reliquary from Abydos was used. The reliquary consisted of an *inswty* “basket of rushes” containing . . . a vase *qrht* which held the sacred and crowned head of Osiris.¹²⁶

Clement of Alexandria wrote: “The formula of the Eleusinian mysteries is as follows: I fasted, I drank the draught; I took from the chest *kístē* having done my task I placed in the *kálathos* ‘basket’ and from the basket into the chest.”¹²⁷ The inscriptions of the mystery of Osiris at Denderah contain the following passage: “This *qrht* ‘pot’ is placed in his [the priest’s] hands and he says: ‘I am Horus who comes to your ladyship. I bring you these [things] of my father [Osiris].’”¹²⁸ Plutarch also referred to a festival that seemed to involve something similar: “On the night of the nineteenth day they go down to the sea and the priests take out the sacred box [*kístē*] which has inside a golden casket [*κιβώτιον*]. Into this they pour some drinking water which they have brought with them and the people present shout ‘Osiris has been found.’”¹²⁹

In the *Golden Ass*, Apuleius mentioned a priest in the mysterious procession carrying a box, *cista*, holding “secret things and concealing within it the hidden attributes of the sublime faith.”¹³⁰

Can *kálathos* be derived from *qrht*? *Kálathos* has a bewildering array of

meanings. Primarily it is a narrow-based basket carried in rituals of Demeter. It also part of the terminology of the Eleusinian mysteries.¹³¹ In the same way *kr̥ht*, as a pot, was used in the Osiran ceremonies recorded at the Ptolemaic temple Denderah.¹³²

Kálathos, however, can also mean “capital of a pillar,” and the diminutive *kalathískos* is the “coffering or sealing of a room or box.” Another borrowing from *qr̥ht* would seem to be *κάρταλλος* (ζ) a “small pointed basket.” The suffix would seem to be a diminutive. Beyond mentioning a possible relationship to *κυρτός* “curved,” Chantraine offers no explanation.

Chantraine also gives no etymology for *kálathos* but Pokorny links it to *κλώθω* “spin.”¹³³ The *kálathoi*, however, seem to draw their significance not from the material from which they are made but from their shape—narrow at the bottom. This would make it parallel to the *qr̥ht*.¹³⁴ The shape is shared with the head of a cobra *𐩢𐩨𐩣* (I13) meaning “serpent spirit as guardian,” also *qr̥ht*. In Coptic the term *kalahē* means “breast, stomach or womb.” Vycichl follows Crum in maintaining that it is made up of *kala* <*qr̥ht* and *hē* “belly or womb.” Sauneron, however, believes that *kalahē* is *qr̥ht* “the womb or egg” of the primordial cobra goddess, from which all life emanates.¹³⁵ In imperial times many Isiaic baskets, caskets and chests were represented close to snakes. Griffiths plausibly gave these an Egyptian origin.¹³⁶ Given the semantic parallels and the Coptic phonetic development the derivation of *kálathos* from *qr̥ht* seems quite likely. The final *-t* would be aspirated by the previous /*h*/ The borrowing could have taken place before final *-t* *s* were dropped or later re-inserted as an archaism, very common in religious contexts.

At this point we should turn to *κίστη* (H) itself. The normal translation is “basket,” however, it was sometimes made of bark and the loan into Latin *cista* “box, chest” suggests that these meanings were already present in Greek. The Latin *cista*—from which descend many Celtic words and Teutonic words, including the English “case,” “chest” and “cist”—is generally acknowledged to be a loan from *kistē* probably through Etruscan. The only possible Indo-European cognate for *kistē* is the dubious Old Irish form *ciss* “basket.”¹³⁷ This too is more likely to be a loan from *cista*.¹³⁸ In any event, the better attested Irish word *ciste* must be a borrowing. Given the religious context, Chantraine is uncertain and concludes that it may be a loan.

It is possible that there is also ambiguity among box, hamper or basket on the Afroasiatic side. Orel and Stolbova postulate a root **kič* “basket,

container” found in West Chadic and Central and Eastern Cushitic.¹³⁹ Whether or not it is related, the Egyptian *qrst*, “burial” *qrsu* “coffin” and *qrstt* “funeral equipment” are all written with $\equiv$ (Q6). In Late Egyptian there is *qrst* “coffin, box-shaped sarcophagus.” *Qst* is “burial” and “embalment” in Demotic. *Qrsu* “coffin” is written *kaise*, *kese* (S) and *kaisi* (B) in Coptic. Vycichil reconstructs a sequence **qirsat* > **qiasat*.

Qrst “burial” became *kōōs*, suggesting an original /*āā*/. Its qualitative or completed form is *kēs*.¹⁴⁰ Thus either word, at some point in the Late Bronze Age when the final /-t/ was still pronounced, provides good etyma **ke/ist* for *kistē*.

Eumolpids and Kērykes

As is well known Greece had many fewer priests and fewer still priest-hoods than did Egypt. At Eleusis, however, there were two important priest-hoods—the **Εὐμολπίδες** Eumolpids and the **κῆρυκες** *kērykes*. The first had an ultimately Semitic name and the second, an Egyptian one.

The ancients did not doubt that the cult of Demeter and the mysteries associated with her came from abroad. The Homeric *Hymn to Demeter* portrays the goddess arriving at Eleusis to be welcomed by the local notables including Eumolpos, the eponymic founder of the family of the Eumolpids, who with the less important clan of the Kerykes provided priests for the cult throughout antiquity.¹⁴¹ On the other hand, Plutarch, Pausanias and Lucian claimed that Eumolpos had come from Thrace to Eleusis to found the cult.¹⁴² Apollodoros maintained that the founding priest was brought up in Ethiopia.¹⁴³

Against these, Diodoros’ Egyptian informants told him that the Eumolpids derived from Egyptian priests and the Kerykes from the lesser rank of the Pastophoroi. These informants also claimed that the mysteries had been introduced to Eleusis by Erekhtheus, whom they saw as the Egyptian king of Attica during his reign *c.* 1409/8 BCE.¹⁴⁴ The Parian Marble agreed with this date. Apollodoros, however, put the arrival of Demeter and Dionysos somewhat earlier during the reign of King Pandion.¹⁴⁵ Both dates would fit the apogee of the Eighteenth Dynasty. Despite these differences of opinion, there was no dispute over the identification of Demeter with Isis and Dionysos with Osiris and of the gods’ Greek and Egyptian mysteries.

To return to Eumolpos and the Eumolpids: despite the widespread

attribution of their Thracian origin, they themselves believed they were from Egypt and had preserved Egyptian traditions. It was probably as an expert on Hellenized versions of Egyptian religion that Ptolemy I summoned the Eumolpid Timotheus for consultation on the formation—or reformation—of the cult of Serapis.¹⁴⁶

Connections between Eumolpos and Egypt are strengthened by the clearly Egyptian origin of **Μελάμπος**. Taking away the prefix *eu-* and the common nasal dissimilation *p > mp* leaves the same consonantal structure *mlp*. The two men also had remarkably similar legendary functions. Melampus, thought to mean “black foot,” was associated with **μελάμβροτες** “Negroes.” The view of Egypt as a land of magic and medicine was almost universal in antiquity. Thus, Melampus as an Egyptian may well be the legendary ancestor of the hero in the *Odyssey* who was a skilled diviner and understood the language of animals.¹⁴⁷ According to Pherekydes and Herodotos, through his ability to cure madness Melampus acquired five-sixths of Argos.¹⁴⁸ This claim is very interesting in the light of other traditions referring to the Egypto-Syrian acquisition of the eastern Peloponnese.¹⁴⁹ According to Herodotos, Melampus brought the name and worship of Dionysos and, in particular, his phallic processions from Egypt to Greece.¹⁵⁰ Clement of Alexandria enlarged on this to write that it was Melampus who introduced the festivals of Demeter and her grief to Greece from Egypt.¹⁵¹

Without the nasal dissimilation *mrp/mlp* points more to the Levant than to Egypt. Traces of **Μέροψ**, the legendary first king of Kos, **Μεροπίη** or **Μερόπη**, the skilled healer, are found all over Greece but especially in connection with the worship of **Ασκληπιός**, the origin of whose name from *Hpr* will be discussed in the next chapter. Michael Astour has provided detailed evidence of their derivation from the West Semitic root *√rp* “heal” and the attested form *mərappē* “healer.”¹⁵² He has also connected these to Marapijo, a personal name from Knossos. Oscar Landau, however, sees the name as Melampus or Melampios.¹⁵³ These explanations are not necessarily exclusive. While the name Melampus may well have been influenced by *mēlas/mēlanos* “black” and hence Egyptian. Like **Μέροψ**, it probably derived from *mərappē* Melámpus with a nasal dissimilation before the Canaanite shift *ā > ō* and **Μέροψ** after it.

In the city of Megara, Melampus was thought to have been an early settler and was closely associated with the temple of Dionysos. Nearby in **Αιγόσθυνα**, Pausanias reported that Melampus was worshipped as a

god, a claim that has been confirmed by inscriptions.¹⁵⁴ The initial element of Aigosthena is *aix*, *aigos* “goat.” There is no reason to doubt the belief of the early twentieth-century classicist A. B. Cook that Melampus was a form of Dionysos as a goat and as a healer, especially from madness.¹⁵⁵

Megara is only ten miles to the west of Eleusis. Can Eumolpos be linked to Melampus, the Dionysian ecstatic diviner and healer, to Merops also a healer and the Semitic *mərappe*? Paul Foucart derived Eumolpos from *melpō* “to dance, sing.” *Molpē* and *mólpos* “singer, musician.” He went further to claim that Eumolpos “good singer” was a calque for *m3’ hrv* “true of voice,” as discussed above.¹⁵⁶ Whether or not this is the case, Pausanias noted a link between *mo/elp* and Dionysos: “In it [a colonnade near the Temple of Demeter in Athens] too, is the house of Pulytion in which they say some illustrious Athenian parodies the Eleusinian mysteries; but in my time it was consecrated to Dionysos. This Dionysos was called ‘the minstrel Melpomenos.’”¹⁵⁷

Although *mo/elp* sometimes referred to secular music and dance, it was more often associated with ritual and ecstasy. As it has no Indo-European etymology, it would seem plausible to derive it from *mərappe*.¹⁵⁸ It appears to have another Greek derivative, **μορφ**- (H), which also lacks a plausible Indo-European origin.¹⁵⁹ The stem is believed to have a basic meaning of “shape.” Such an interpretation, however, contains serious anomalies. **Μορφή** only occurs twice in Homer, where it is usually translated as “beautiful, graceful.” In both cases, however, it was used to describe the power of eloquence to move others with a sense of verbal conjuring.¹⁶⁰

In later writings where it is used to signify “form,” the word frequently refers to the shape of dreams fantasies. *Morphē* seems to have been the origin of Ovid’s Morpheus, the son of sleep and the bringer of dreams.¹⁶¹ *Morphē* also means “gesticulation.” The derived verb *morphazō* is “to gesticulate” and has the nominal form *morphásmos* “dance in imitation of animals.” Thus the fundamental sense of *morph* is not “shape” but rather that of *morphóomai* “to take a form” *morphoō* and *metamorphoō* “to give shape and transform” in a magical way through dance and song.

Greeks believed that Egyptian gods and men were skilled in magical transformations. In the *Odyssey* “the immortal Proteus of Egypt” was capable of taking any kind of shape.¹⁶² Osiris, under his later name as Serapis, was well known as a performer of miracles who could change his form as well as carrying out the related role as healer.¹⁶³ Isis’ associa-

tion with magical change and healing was even stronger. The classic instance of this was in Apuleius' *Metamorphoses*, in which the hero Lucius was transformed from being a donkey back to his human shape through Isiaic ritual and the goddess's love and power.¹⁶⁴ In the *Contendings of Horus and Seth*, 150 years earlier, Isis had transformed herself into an old woman, a maid, a bird (specifically, a kite) and a headless statue.¹⁶⁵ Similar transformations are described of Demeter in the Homeric hymn dedicated to her.¹⁶⁶ Diodoros quoted Egyptians who told him that Isis had discovered many drugs and had resurrected her dead son Horus and made him immortal.¹⁶⁷ This idea about Isis clearly came from a very ancient tradition. In the *Pyramid Texts*, inscribed 2500 years earlier, Isis and her sister double Nephthys arrived "with healing on their wings" to heal and resuscitate Osiris.¹⁶⁸ Thus, there is no doubt that Isis' association with healing and revivifying far antedated any possible Greek influence.¹⁶⁹

To sum up: Melampus, *mo/elp*, Merops and morph- all seem to derive from the West Semitic *mṛp* "shaman, ritual healer." Despite the Semitic etymology, however, all, with the possible exception of Merops, have Egyptian associations and are linked in some way to Isis/Demeter and Osiris/Dionysos. Eumolpos and Melampus were specifically tied to the introduction and identification of Greek and Egyptian cults. Even though they claimed, and in many respects actually were inhibited by, religious scruples, Eumolpos and Melampus are able to provide specific proofs of the connection. Furthermore, increasing knowledge of Egyptian religion during the nineteenth century, especially the translation of various recensions of the *Book of Coming Forth by Day* (also called the *Book of the Dead*) showed striking similarities between the two systems.¹⁷⁰ Thus, it is not surprising that the names Eumolpos and Eumolpid should have a plausible Afroasiatic origin.

The other lesser priesthood at Eleusis was that of the Κήρυκες or Κηρύκιδαι. The name is obviously linked to κήρυξ κηρύκος "herald," the origin of which from the Egyptian *q3 hrw* "high, loud of voice" was discussed in Chapter 17 as "one who announces the rituals or sacrifices."¹⁷¹

CONCLUSION

The relationship between the Greek mysteries and Egypt are particularly close. The etymologies claimed in this chapter, however, indicate

an intimate connection between Greek religion and those of Afroasiatic speakers. This claim will be strengthened by the study of proper nouns in the next chapter. As with other semantic realms we have considered, the Egyptian component is larger than the Semitic. Because of the great reputation of Egyptian religion in the ancient world, I had anticipated that the disproportion would be far greater. The evidence confirms what the great scholar Victor Bérard argued in his study of Arkadia at the end of the nineteenth century: despite the preponderance of Egyptian influence on Greece during the Late Bronze Age, Semitic influence on Greek religion was also significant in or before that period.¹⁷²

CHAPTER 19

DIVINE NAMES

Gods, Mythical Creatures, Heroes

INTRODUCTION: GODS

*The names of nearly all the gods came from Egypt. I know from the enquiries I have made, that they came from abroad and it is most likely that they came from Egypt, For the names of all the gods have been known in Egypt since the beginning of time.*¹

*The sea made it natural for Greeks to turn to neighbouring maritime peoples rather than to the hill-dwellers who lived on the European mainland. Egypt and Asia Minor were more interesting than Macedonia and Illyria. From these already ancient cultures the early Greeks learned many things: the names of exotic gods and goddesses such as Hera and Athena, who became fully naturalized . . .*²

The two quotations above demonstrate that the general claims made in this chapter are neither new nor entirely out of fashion. Furthermore, Herodotos and other ancient writers paired Egyptian with Greek deities: Ammon with Zeus, Neith with Athena, Ptah with Hephaistos and so on. The second passage illustrates that some modern scholars still entertain such general views. What is new in this project are descriptions of the modes by which specific Greek divine names derived from Egyptian prototypes.

In Chapter 5, I argued that the inordinate number of prothetic vowels in Greek can be explained as the result of massive borrowings from Afroasiatic: either from words beginning with >aleph , 'ayin , he and het or from the prothetic vowels used, but not always written, in Egyptian.³ The proportion of the names of Greek gods and heroes beginning with *alpha* is significantly higher than it is for words in the vocabulary as a whole. Among the gods one finds Apollo, Aphrodite, Ares, Artemis, and Asklēpios, for example. All of these—with the exception of Ares—have strong Egyptian etymologies and very implausible Indo-European ones. Furthermore, these are not the only Greek divine names of Afroasiatic origin. I believe that I can show that Hephaistos, Enualios and Zeus all have reasonable-to-good Egyptian etyma.

ἩΠΡ “BECOME” ἩΠΡΡ, APOLLO, ASKLEPIOS, PYTHON AND DELPHI

Chapter 21 will focus on Hermes and Chapter 22 on Athena. This one begins with Apollo as its central figure as well as with names associated with him; notably those of his avatar Asklepios, as well as Apollo's city Delphi his sea mammal *delphis*, his sacred plant *daphnē* and his birthplace Delos. The rest of this chapter will list the names of gods already treated and consider some others that have not so far been discussed.

APOLLO THE “ARYAN”

From at least the fifth century BCE until the early nineteenth CE Apollo was universally assumed to be the young god of the sun. Karl Ottfried Müller challenged this image with his view that Apollo was the dynamic “golden-haired” tribal god of the northern Dorians. He claimed that the earliest Greek texts did not refer to the god's solar aspects.⁴ Its arguments—and those of his successors—against the long-standing tradition of Apollo as a sun god were and remain impressive. Apollo is an important divinity in the works of Hesiod and Homer but he is known as an archer, bringer of disease, a healer and the leader of the muses. Nowhere in these works is he explicitly equated with Helios, the divinized phenomenon of the “sun.” Helios and Eos “dawn” appear frequently in the epics without any reference to Apollo.

In the mid-nineteenth century K. O. Müller's view was submerged by what L. R. Farnell called “the foolish extravagances of the solar myth

theory” championed by Max Müller.⁵ The debate between the two interpretations has swung back and forth since then with various attempts at compromise.⁶ Nevertheless, while the popular view of Apollo as a sun god survives, most scholars generally side with Karl Ottfried Müller on this issue even while deprecating his extreme Aryanism.⁷

In the nineteenth century there was no doubt that Apollo originated from the north. This theory was largely based on the traditions of Hyperborean men and women associated with the god’s cult at both Delphi and Delos. *Hyperborean* was generally taken to mean “beyond the north wind.”⁸ In the early twentieth century by G. F. Hudson demolished the northern connection strongly indicating that the Greek traditions about the Hyperboreans pointed to China via Central Asia. Incidentally, the traveler Aristee of Prokonessos, who appears to have reached the modern Xinjiang in the seventh or sixth century BCE, claimed to have been inspired by Apollo.⁹ Hudson’s hypothesis has been confirmed by archaeological discoveries of Chinese silk in tenth century BCE Egypt and sixth century Germany.¹⁰

Thus in the late twentieth century CE, while Apollo was still seen as “the most Greek of gods,” scholars were open to the idea of eastern connections, most preferred Asia Minor.¹¹ There are, indeed, a number of possible Anatolian forms: a Lydian name Πλδανς Artimuk (for Artemis); the Hittite form ap-pa-li-u-na-š is probably a divine name and the name Apulunas appears in hieroglyphic Hittite of the First Millennium.¹² Walter Burkert denies the validity of all of these.¹³ He writes, however, that “there remain remarkable and probably ancient connections between Delos and Lycia, and there is also a series of Apollo oracles running along the coast of Asia Minor. . . .”¹⁴ Given my view of an Egyptian origin for the name, I see no objection to any or all of these parallel forms. There is no reason why coastal Anatolian cultures should have been any less influenced by Egyptian and Phoenician culture than those of the Aegean.

The nineteenth-century explanation for the name Apollo rendered Ἀπέλλων in Dorian from a Dorian word, ἀπέλλαι (1), meaning “sacred assembly.” Unimpressed, the lexicographers Frisk and Chantraine declare that the etymology of Apollo is “unknown.” The historian of Greek religion D.C. Dietrich is equally skeptical.¹⁵ Burkert, however, still maintains the hypothesis. He argues that these assemblies were used for the initiation of youths into manhood and full membership of the community. He points specifically to Apollo’s epithet ἀκερσιμενος “unshorn locks” (suitable for a boy before initiation) found in the *Iliad*.¹⁶ The power

of this evidence is weakened by the fact that all serious derivations of Apollo and his cult insist on the god's youth.

Frisk and Chantraine (more cautiously) derive *Apellai* itself from a hypothetical Indo-European **ṇ-pel-ǵä* "in drive." An alternative to this is from the Egyptian *ip* in the sense "to muster, assemble people" with the post position *-r*.¹⁷ This would make *apellai* yet another of the Laconian terms drawn from Late Egyptian.¹⁸ Neither etymology explains the double -ll, and it is possible that this was the result of association either with Apollo or the proposed Egyptian etymon *Hpr*.

WAS APOLLO A SUN GOD BEFORE THE FIFTH CENTURY?

Part 1: Evidence from the Greek epics

The scholarly consensus still maintains that the solar aspect of the Apollonian cult only developed in the fifth century.¹⁹ The absence of the name Apollo from the Linear B apparently reinforces this idea. As mentioned above, however, the name Payawo, *Paiēōn* a healing deity that later merged with Apollo, does appear in that corpus. The derivation of **Paiēōn** from ***p3 iwn** as a biname of Horus was suggested in Chapter 9.²⁰ In the *Iliad* *Paiēōn* cured the injured.²¹ Both the high reputation of Egyptian medicine and *Paiēōn* as a healing god are reflected in a passage from the *Odyssey* quoted in Chapter 7; it states that the Egyptians were all physicians, were "wise above mankind" and were the "race of *Paiēōn*."²² This is closely parallel, and almost certainly a calque from *šms(w) Hr*, "followers of Horus," the primeval kings of Egypt and, in the singular, a "righteous person."²³ A similar parallel of Apollo and *Paiēōn* with each other and life-saving medicine appears in a fragment from Hesiod.²⁴ Horus, too, had his healing aspect.²⁵

It is not controversial to find early traces of the merger of the cult of *Paiēōn* into that of Apollo. What has been debated since the nineteenth century is whether Apollo was originally seen as a sun god. I believe from Egyptian parallels that this was undoubtedly the case. Before examining this material, however, I should like to consider evidence from within the Greek tradition.

First, there is the ancient and widespread cult of Apollo Λύκειος; Homer appears to have interpreted this epithet as "coming from Lycia" (in Anatolia). In the *Iliad*, Lycian heroes swear by Apollo λυκηγενής.²⁶

The term has a wonderful ambiguity. It could mean “born in Lycia”; “wolf-born” from λύκος “wolf” with its impeccable Indo-European etymology; or “light born” or “light begetting” from the ancient Greek morpheme λυκ- from an Indo-Hittite, if not Nostratic, root.²⁷ An enlarged form λύκη is found in the compound ἀμφιλύκη, meaning the “light before the dawn.” Also, lukēgenēs could be derived from any two, or all three, of these sources.²⁸

Apollo fought on the Trojan side at the siege of Troy, and Homer no doubt believed that the cult of Apollo was strong, if not central, in western Anatolia. As well as references to such a cult in Lycia, there was another in Mysia and the Troad.²⁹

Farnell considered the possibility that there was a cult of Apollo Λύκειος “the wolf,” in Lycia but he had doubts about it.³⁰ Elsewhere, he found references to statues of wolves associated with Apollo Λύκειος but was unable to find clear evidence of any wider wolf cult in Greece. He concluded that the statues were traces of an extremely ancient, primitive and largely abandoned religious practice.³¹

In Hellenistic times the third alternative was preferred and Λύκειος was explained as deriving from λύκη “light.”³² In this case the representations of wolves could be explained as the result of a folk etymology as well as the fact that it is easier to carve or cast a statue of a wolf than one of light or dawn. As the cult of Apollo Λύκειος is extremely ancient and was referred to by Homer, it provides one indication that Apollo may have been associated with “light” and more precisely with “dawn,” well before the fifth century.³³

Another word based on the polysemic root *λύκ is λυκάβας (H). In the two attestations of the word in the *Odyssey* it is followed by promises of Odysseus’ homecoming: “as the old moon wanes and the new one appears.”³⁴ In later Greek, however, it meant “year.” Modern scholars have given its original—or Homeric—meaning many interpretations. It has been linked to *λύκ as “wolf” and Lycian.³⁵ These are less likely than the proposal that *lukabas* derives from λύκ-+ βαίνω, the “going of light” or the dark night of the first new moon.³⁶ It should be remembered, however, that *bainō* can mean “come” as well as go, hence it could mean “dawn.” Whatever the precise meaning, the form clearly means a period of time, possibly the completion of a cycle. Szemerényi derives it from a Semitic term found in the Ugaritic *nqpt* “a cycle of feasts.”³⁷

Wilamowitz-Moellendorff and Gilbert Murray argued that Odysseus’ return to Ithaca was on the point 19 years (after he set out from Troy)

when the solar year and lunar month come together. This measurement is called the Metonic cycle after Metōn of Athens, who in 432 BCE was the first to set it out. Wilamowitz-Moellendorff and Murray plausibly maintained that these passages from the *Odyssey* indicate that the cycle was known centuries earlier, at the time when they believed the epic was composed or redacted.³⁸

Norman Austin appears to have been following this theory, when in his study of Odysseus' homecoming he wrote: "Whether *lukabas* be year or month, however, makes little difference in the circumstances for the year has practically run its course: 'this year' and 'this month' are at this point in the poem, synonymous."³⁹ Austin makes a powerful case for the hero's arrival in Ithaca in or after winter.⁴⁰ The key date for Odysseus' return is the feast of Apollo, which the scholiast states was that of Apollo Νουμηνίος "of the new moon." If Wilamowitz-Moellendorff, Murray and Austin are right this new moon was special and ushered in the new year. The feast of Apollo, the archer god, was appropriate for Odysseus' bloody display. There is annual or solar symbolism, however, in the hero's earlier shooting through or threading twelve axes.⁴¹ Arguing against this symbolism is the thesis put forward by Wilamowitz-Moellendorff, and accepted by Nilsson, arguing for an eastern origin for Apollo. They pointed out that, unlike the other gods who generally were celebrated at the full moon, his feast day was on the seventh day of the lunar month. They saw this day as a strict parallel to the Babylonian *Sabattu*, the seventh day of the month set aside for expiations and purifications.⁴² In any event, the *luk stem clearly indicates that from Homeric or pre-Homeric times, Apollo was associated with the calendar and heavenly lights, the sun and the moon.⁴³ Farnell and Bethe opposed this idea advanced by Wilamowitz-Moellendorff and Nilsson.

STEALING THE CATTLE OF THE SUN. In the *Odyssey* Odysseus' crew, though not Odysseus himself, steal and eat Helios' cattle.⁴⁴ In many ways Odysseus—"the traveler"—can be seen as his legendary great-grandfather Hermes.⁴⁵ Even earlier Hesiod referred to the same story with the cattle belonging to Apollo rather than to Helios. In *The Great Eoiae*, which is often attributed to Hesiod, the poet wrote "then Hermes made designs on Apollo's herd of cattle."⁴⁶ This version was set out in more detail in the Homeric *Hymn to Hermes* in which Hermes, born at dawn, dashes through the day always one step ahead of Apollo, hiding from and tricking his elder brother. Hermes' most egregious act was to

steal fifty of Apollo's cattle. Farnell saw in this a threat to his denial of Apollo's early solar aspects. He wrote, "Apollo loses his oxen as Helios does, though the circumstances are different; the stealing of divine cattle may sometimes be a solar story, but need not always be."⁴⁷

As well as neglecting the passage from Hesiod, Farnell drastically underestimated the parallels between the story in the *Odyssey* and that in the Hymn. I believe that one can take the relationship a stage further and see that already at least by Homer's time, Hermes and his great-grandson Odysseus were identified with the planet Mercury.⁴⁸ Mercury's course is the most extreme ellipse and it travels farthest of all the planets beyond the ecliptic, passing from the living sky with the moving planets and the Zodiac to the "dead sky" around the pole. Similarly, Hermes-Odysseus is the trickster figure who passes between and connects the worlds of the living and the dead. The Latin Mercurius is the "trader."⁴⁹ Odysseus' descent into Hades and the ascent into Skheria with its remarkable resemblances to the stellar Field of Rushes of the Egyptian Sḥt i3rw are discussed in Chapter 10.⁵⁰ Hermes as the planet Mercury was Hermes Psychopompos, the guide for dead souls, the communicator between realms and the counterpart of the Egyptian Anubis.⁵¹

The idea that Venus and Mercury move around the sun has been attributed to Heraklides of Pontos in the fourth century BCE, although G.E.R. Lloyd is skeptical.⁵² On the other hand, the *Hymn to Hermes* strongly suggests that this attribution was known to Greeks by the seventh or sixth centuries. Mesopotamians had much earlier an extraordinarily sophisticated understanding of Mercury's relationship to the sun.⁵³ Further evidence of the planetary basis of the Homeric Hymn comes in lines 76–8, and 210–26 when Hermes turns the hooves of cattle back to front so that they and their tracks appear to be going backwards. This is clearly pointing to the well-known planetary "retrogradations." G.E.R. Lloyd describes these: "From time to time the position of a planet in relation to the fixed stars appears to remain the same for a number of days; the planet then appears to move back, from east to west, through the constellations for a time; and then after a second stationary period it resumes its usual easterly movement. . . ."⁵⁴

The mythology brought out in the Hymn is complicated or enriched by another association, that of Hermes with the moon. He was given lordship over "boars with gleaming [ἀργίοδους] tusks."⁵⁵ In this capacity he was the counterpart of the Egyptian god Thoth. The Hymn, however, focuses on the whizzing planet. Thus, not only does it strengthen

the three-way identification of Hermes with the planet Mercury but also the conjunction of these lines in the *Odyssey* with the Hymn confirms that, at least for the later text, there were close parallels between Helios and Apollo.

Part 2: Evidence from Egyptian parallels

APOLLO AND HORUS. Herodotos stated explicitly “the Greeks call Horus son of Osiris, Apollo.”⁵⁶ The identification is implicit throughout his work. The question is how far back can this identification be traced? The most frequent epithet for Apollo was Phoibos, the origin of which was discussed in Chapter 9.⁵⁷ Although this term indicates “brightness,” it has no specifically solar implications. The next most common epithets are ἐκάεργος and ἐκηβόλος or ἐκατηβόλος “far-worker, far-shooter.” This is interesting because the generally accepted origin of the name Hrw, is from *hr* “distant.”⁵⁸ In Egyptian theology Horus was the falcon high in the sky swooping down on his victims. In the *Iliad* Zeus orders his son to encourage Hector: “Nor was Apollo disobedient to his father’s bidding, but he went down from the hills of Ida like a swift falcon [ἵρηκι ἐοικώς] the slayer of doves, that is the swiftest of winged things.”⁵⁹ In the *Odyssey* one finds the description “a hawk, the swift messenger of Apollo.”⁶⁰

The epithet ἐκάεργος was frequently preceded by ἄναξ, so too was Διὸς υἱὸς “son of Zeus” and sometimes Anax was used alone.⁶¹ In Chapter 10 I argued that *anax-anaktos* derived from *nh dt* “may he live forever.”⁶² This was the normal formula placed after the names of living pharaohs. Horus has been identified with the living pharaoh since the Fourth Millennium.⁶³ Pharaohs had many names but the first, and in ancient times the primary one, was the Horus name which, as Gardiner put it, “represents the king as the earthly embodiment of the old falcon-god Horus, who early became the dynastic god of Egypt and as such was identified with the sun god Rē himself On the whole we may conclude that the Horus name denotes the aspect of Horus worn by the king whilst dwelling in the palace [not the tomb].”⁶⁴

TROIEN, OROS AND APOLLO. Troizen was set across the Saronic Gulf from Athens. The city claimed unparalleled antiquity and Pausanias speculated that it may have been founded by an Egyptian and that Ὠρος “looks like an Egyptian not a Greek name.”⁶⁵ Pausanias reported:

The Sanctuary of Apollo Thearia was built they said by Pittheus Πιτθεύς and it is the oldest sanctuary I know. The temple of Athena at Phokeia in Ionia, which was burned by Harpagus the Mede, is undoubtedly ancient and so is the temple of the Pythian Apollo at Samos; but both were built long after the sanctuary at Troizen.⁶⁶

Pausanias' hypotheses that Troizen was both extremely ancient and had Egyptian connections are supported by evidence from both names and archaeology. The name Oros immediately suggested to Pausanias, as it does to us, the Egyptian god Horus, which is written *Oros* in Greek.

This temple leads us to the critical link between Horus and Apollo: they were both dragon slayers. Horus killed his uncle and his father's murderer Seth who was in the form of a water monster. Apollo killed the Python. It is interesting to note, that a church for the Christian dragon slayer St. George was built on what seems to have been the same spot.⁶⁷ Apollo and Python will be discussed later in this chapter.

THE SUN, THE MOON AND THE EYE. Earlier in this chapter, I showed that through the root *luk Apollo could be associated with both the sun and the moon. Horus too was associated with both the sun and the moon, his "two eyes."⁶⁸ The complications of the cults and myths of the two hawk eyes are immense, but central to all is the sense that one had been injured by Seth but cured by Thoth. The associations are largely, but not exclusively, with the waxing and waning of the moon.⁶⁹ Despite the direct links with Thoth, there are some with Horus himself. Just as Hermes was given the "gleaming boars tusks [ἀργίοδονσι]," Apollo had an ἀργρέιος βιος or ἀργυρότοξον "silver bow."⁷⁰ According to Apollonios of Rhodes, Apollo also had a "golden bow" (solar) which blazed through the darkness and appears to be linked to the epithet αἰγλήτης "gleaming."⁷¹

Apollo's arrows play a very important role in the epics and there are—as far as I am aware—no references to Horus as an archer. He was, however, famous for his harpooning.⁷² Thus, Apollo's use of the bow and arrow can be explained as modification of the Egyptian tradition by Greeks for whom harpoons were not important and which fit well with the epithets "far-worker" and "far-shooter."

Despite these possible lunar associations, Horus was fundamentally associated with the sun. Thus, the substantial evidence of early parallels between Horus and Apollo traced above make it clear that among

his other aspects, Apollo was seen as a sun god long before the fifth century BCE.

Hpr̄r, Ἀπόλλων. Since the *Pyramid Text*, a particular form of Horus was associated specifically with the morning sun: Hr 3ḥty “Horus of the horizon” written with the sign  (N27) doubled. Hr 3ḥty was seen as the equivalent of Rē.⁷³ This and another form—Hr m 3ḥt, transcribed in Greek as Ἀρμαχίς, was Horus of the rising sun—were seen as equivalents of Hpr̄r.⁷⁴

For most of their history Ancient Egyptians worshipped different aspects of the sun. The sun as a whole was Rē (Ra), its disk was Itn (Aten), in the evening it was Itm (Atum) and in the morning Hpr̄r (Khopri). From the time of the *Pyramid Text* all of these aspects had been closely identified with each other.⁷⁵ Etymologically, Hpr̄r is derived from *hpr* “become, come into being” and is related to *hpry* “children.” These and other members of the cluster are written with the determinative and trilateral of the scarab  (L1) *hpr* (the beetle rolling the dung ball symbolizing the sun, up the heap) symbol of health and rebirth. *Hpr̄r*, then, was the young god of the sun at dawn and of medicine and rebirth.

Apollo as the youthful divinity of the sun and one concerned with medicine provides a neat semantic fit with Hpr̄r. Phonetically, the two have the attractive feature of the double liquid in both Hpr̄r and Apollo. The problem is that /h/ was very seldom transcribed into Greek as /ø/. Such a borrowing would, however, be possible if the introduction were late and had come through Phoenician in which /h/ had merged with /ḥ/, which was frequently rendered /ø/ in Greek. A borrowing from Phoenician after the Canaanite shift is indicated by the vocalization of Ἀπόλλων as (C)aCoCCō.

Relative lateness is also suggested by the fact that the name Apollo, as opposed to that of his counterpart Παιήων, has not so far been attested in Linear B. The Egyptian etymology of Paiēōn was set out in Chapter 9.⁷⁶

Hpr̄r and scarab. Two forms of *hpr* survived in Coptic, *špē re* from *hprt* “event, happening” and *šōpe* “to be, exist, become.” In the latter case, the long /ō/ suggests that there had been metathesis of the accepted type, transfer of liquid in third to second position, that is from *hpr* to *ḥrp. Stronger evidence that this change took place comes from beyond Egyptian. First, there is the Greek doublet κηραφίς, κάραβος (4) “lobster, crab, horned scarab.”⁷⁷ In Chapter 8, I listed the ways by which the Hebrew /š/ was transcribed into Greek: /χθ/, /khth/, /σχ/, /skh/,

/σκ/, /sk/ or /ξ/, /ks/, and finally as simple /σ/, /s/. Similar confusion undoubtedly held for the Egyptian and Coptic /š/ particularly during the shift from /ḥ/.

Ernout and Meillet derive the Latin *scarabaeus* “scarab” from *karabos* by postulating an earlier *scarafaius. This is unnecessary if they are seen as earlier and later borrowings from Egyptian *ḥrp and *šrp. Scarab amulets, providing protection for health and rebirth, are found not only in Egypt but throughout the Mediterranean and the Roman Empire beyond. Thus, there is every reason to suppose that *scarabaeus* took its name from a form of *ḥpr* the Egyptian word for “scarab.”

The name of the god ***Ἀσκληπιός** has many variants: Ἀσκληπιός, Αἰσκληπιός, Αἰσχλαπιός, Αἰσχλαβιός, etc.⁷⁸ Such variety suggests a loan. Chantraine concludes that the etymology is “unknown, but a borrowing would not be surprising.” Asklepios as a god of medicine was sometimes seen as the counterpart of the divinized early Egyptian polymath and doctor Imhotep.⁷⁹ Michael Astour has written a detailed study showing the further links between the mythical figures Ἀσκάλαφος “owl” and Ἀσκάλαβος “lizard or lizard-headed snake.” Their names are clearly variants of Asklepios. Both creatures were symbolically associated with medicine and death. The owl was the sacred bird of Kos (kōs is Hebrew for night owl), the island center of Greek medicine.⁸⁰ Asklepios also closely paralleled Apollo through their common association with healing.

Astour puts the lack of an Indo-European derivation more strongly than Chantraine: “the name Asklepios absolutely does not surrender to even the remotest Greek etymology.” He suggests that the name derives from the Akkadian *ēšēpu*, the title of a healing exorcist priest and the word for “owl.”⁸¹ No doubt, Ancient Greek medicine contained important Mesopotamian influences, including the now worldwide medical symbol of a snake wrapped round a staff.⁸² Nevertheless, it is generally agreed that the most extensive outside influence on Greek medicine came from Egypt.⁸³ Thus, it would seem reasonable to consider an Egyptian loan. The obvious candidate is the reconstructed derivation from ḥrp, šrp. Among the correspondences listed above, /š/ could be rendered as /sk/ as with *scarabaeus* or /skh/. A reduction of the first vowel, would have left a complex *skrVp or *skhrVp, which would have necessitated a prothetic /i/, giving /a/ or /ai/—an alternation found in the Greek variants.

The etymological relationship between Apollo from *ḥpr* and

Asklēpios from *šrp is matched by the mythological connection. Apollo as a healer, with the epiclesis **Μαλεάτας** (6), was closely associated with Asklēpios. Farnell dismisses the hypothesis that Maleatas derives from the place name Malea and insists that its use was associated with sickness and healing and that it was always adjectival. This idea weakens the notion that Maleatas was once an independent deity.⁸⁴ The most plausible etymology is the Egyptian *mrt* “disease.” All myths make Apollo the father of Asklēpios.⁸⁵

TWINS, APOLLO AND ARTEMIS

I shall argue below that Delphi, like **ἀδελφός** “brother,” came from Semitic roots meaning “couple, twin.” Thus Apollo’s title **Δελφίνιος**, common in Crete and elsewhere is a doublet of his epiclesis **Αίδυμος** “pair, twin.” The city and the oracle got their name from “twinness.” Apollo’s twin was Artemis. In Hellenistic and Roman times Artemis-Diana, was seen as the huntress goddess of the moon. Her Egyptian equivalent in this respect was the goddess B3st whose most important cult center was Pr B3st, Bubastis—discussed above in Chapter 9.⁸⁶ B3st was often represented as a cat and, in this aspect, she was identified with the moon. She also had a fiery aspect, however, and in Memphis was worshipped as a lion goddess so fearful that she was known by the euphemism Shmt “mighty.” Tmt seems a reasonable candidate for the occluded name. As in Ptolemaic Denderah, B3st was known as the female counterpart of Tm and at Heliopolis B3st was known as “daughter of Atum.”⁸⁷ As such, she was seen as helping Horus destroy his enemies. In this capacity she was seen as a lioness and identified as the female counterpart of Ra and itm, Atum or Tm, god of the evening sun.

The nineteenth-century dismissal of Apollo as a sun god was paralleled by a skepticism about Artemis as a goddess of the moon or sunset. Apart from the value of the “later” testimony to that effect and the Egyptian evidence, more support is provided by some of the goddess’ epithets. Many references to cultic names are associated with the moon. A fragment from Aiskhylos reads, “whom neither the ray of the sun beholds, nor the starry eye of Leto’s daughter [Artemis].”⁸⁸ Given the general acknowledgment of the dramatist’s use of early sources, the lines cannot be dismissed as “late.” She was known as **Σελασφόρος** “moon bearer” at Phlya in Attika.⁸⁹ With more ambiguity between sun and moon

she was also known as Φωσφόρος “light bearer.”⁹⁰ Other epicicles indicate heat as well as light. Artemis Πυρωνία “fiery” provided sacred fire for the Lernian festival.⁹¹ On the Euripos she was known as Αἰθοπία, “burning face.” At least from the fifth century she was represented as holding a torch.⁹² Like Apollo, Artemis was given the title Lukeia at Troizen.⁹³ In the *Theogony*, Hesiod calls her ἰοχέαιραν. This remains the goddess’s most common epithet in Hesiod and Homer. Since ancient times *iokheairan* has been understood as “delighting in arrows.” The semantics are excellent for a huntress goddess and ἰος is undoubtedly “arrow.” There is, however, uncertainty about the length of the initial i- in *iokheairan*. Furthermore, the second element *-kheairan* is disputed and unclear. In Egyptian *ih̥w* was “twilight” sometimes written *iw̥h̥w* and in late times it is attested as *zh̥h̥*. *ih̥w* was also the name of some divine beings, written with *𓆎* (G7) or *𓆏* (N8). In the latter case there was a variant *iz̥h̥w*.⁹⁴ The phonetic range, certainly with metathesis of liquid in second and third position, allows for an etymon of *iokheairan*. Though far from perfect, this etymology as a goddess of twilight certainly equals the Indo-European *iokheairan*.

Other epithets include *khrysos* “gold,” which is frequent with many divinities. One interesting compound form, which is more specific, is χρυσόθρονος “golden throne.” It is applied to Artemis once in the *Iliad* and once in the *Odyssey*.⁹⁵ It is also applied to Hera at sunset and twice to ῥώς dawn.⁹⁶ This raises the possibility that the epithet was inspired by the skies at sunrise and sunset.

Returning to Tm as the god of the evening, his female partner Tmt appears in a late inscription as a counterpart to B3st but she seems to have had some independence as early as the *Pyramid Texts*. In the mid-Third Millennium she seems to have been linked to Rwtj, the two lion gods of the sun, who are associated with Hr 3h̥ty.⁹⁷ The latter’s greatest monument was the Sphinx at Giza.⁹⁸ Egyptologists agree that Σφίγξ derives from *šspw ʿnh̥* “living image.”⁹⁹ *šspw* has a sphinx as its determinative. A text inscribed on the creature’s chest at the command of the late fifteenth-century pharaoh Tuthmosis IV refers to Hr 3h̥ty and Hr(y) Tm, which almost certainly refers to Tm himself.¹⁰⁰ A feminine form *Hrt Tm(t), constructed on the analogy of the attested *hrt tp* “chieftainess,” provides a good etymon for Artemis. The initial a- indicates an early loan before the Canaanite shift. Many examples of the Egyptian h- being reduced to ø- in Greek can be found.

The early association between Tmt and the double lion fits with Artemis' association with lions but it does not explain why the Greeks should have preferred *Hrt Tm(t) to *Hry Tm himself. At this point we turn to a legendary and mythical cycle—that of Thebes fifty miles to the east of Delphi. Here, cosmic myths came together with the legendary Kadmean conquest and settlement. I am concerned with the myths.

Kadmos shared many features with Apollo. Like the rising sun, he came from the east. Qdm itself means “east” in most Semitic languages. Like Apollo (see below) Kadmos slew a dragon guarding a spring and founded a city.

The young sun god himself was present at Thebes where in classical times he was worshipped as Apollo of the Ashes or Apollo Ἰσμήνιος from the river Ἰσμηνός. This name derived from the Semitic root $\sqrt{\text{smn}}$ “fat or fertile” and the divine name Ešmun, god of healing associated with serpents.¹⁰¹ An alternative name for the river was Λάδων, which was also the name of a snake or dragon killed by another divine hero connected to Thebes—Herakles.¹⁰² Herakles was also associated with lions and the sun.¹⁰³

Like Apollo, Kadmos had a sister to whom he was closely attached. Many scholars have derived her name, Europa, from the Semitic 'rb “west or evening.”¹⁰⁴ Europa was often depicted as veiled and associated with blackness. In this she resembled Αἰτώ, the mother of Apollo and Artemis. The name Leto is clearly derived from the Semitic $\sqrt{\text{lt}}$ “sheath veil” discussed in an earlier chapter.¹⁰⁵ It is also similar to early pronunciations of R't, the feminine counterpart of Rē' whose association with Rhea will be discussed below. Clearly, the /r/ in Rē' corresponds to /l/ in other Afroasiatic languages.¹⁰⁶ In general both R't and Leto appear to have been associated with the night sky.

Astour argues plausibly that Leto's daughter Artemis symbolized not only the darkness of evening but also the bodies that shine in it—the evening sun and the evening star.¹⁰⁷ He also suggests that the name Telephassa for the mother of Kadmos and Europa may not merely mean “far shining” but may also be related to the Akkadian name for the planet Venus, Dil Bad—transcribed by Hesykhios as Delephat. In Babylonian astrology Venus the morning star was thought of as male, while Venus in the evening was female.¹⁰⁸ Thus Kadmos' fruitless search for his sister can be seen in cosmic terms as the impossible pursuit of the morning for the evening star. In Egypt the conception of the morning as male and the evening as female was a minor tradition. Among Semitic speakers,

however, it was dominant, which would explain its presence in Greece given the other Semitic associations of these myths.

The Greek tendency in this direction was probably further strengthened by the Hurrian and north Syrian view of a female sun. As in the Egyptian tradition, from which the legend may well have been derived, the Hurrian goddess *Hpt* was seen as a double-headed lion. *Hpt* was mentioned in Volume 2 as the etymon of the names *Hipta*, found in the Orphic hymns, and *Hēbe*, Herakles's wife.¹⁰⁹ The Semitic tradition of the sun as female, *Špš*, can be seen in the ancient Greek mountain name *Sapyselaton*, which Astour plausibly explains as deriving from an Ugaritic **Špš ilt*, the “goddess *Šapšu*.”¹¹⁰

Like Apollo (discussed below), *Kadmos* killed the snake. Even so, both *Thebes* and *Delphi* continued to be harried by monsters in female form. In *Delphi* the monsters were either snake- or lion-like creatures. In *Thebes* one creature had many facets: the *Sphinx* with the head of a woman, the body of a lion and eagle-like wings. Before considering the *Theban Sphinx*, we should look at the *Delphic Python*.

Python

A central myth of *Apollo* was set at *Delphi*, where the young god, accompanied by his twin sister *Artemis*, killed a serpent, *Python* and founded the city that became famous for its oracle. *Apollo* ruled it but *Delphi* continued to be troubled by a female monster or monsters who were in someway connected to the *Python*.¹¹¹

Πυθώ was thought to be the ancient name of *Delphi*. *Πυθών* was the snake or dragon who guarded it and was killed by *Apollo*. *Apollo* took on the titles of *Πύθιος* and *Πυθαῖος* and other titles. Chantraine describes the form as a “toponym without an etymology.” On the grounds of the long /ū/ in *Pūthō*, he follows *Strabo* in doubting the ancient belief that it was linked to *πυνθάνομαι* to “inform oneself, interrogate” often used of oracles.¹¹²

There is a possible Egyptian alternative. In Chapter 9, I discussed the derivation of *potamos* from the toponym *Pr Tm*.¹¹³ In that chapter, I listed a number of variations in the Coptic and Greek rendering of *pr*: *pr-*, *pl-*, *pa-*, *phar-*, *pi-*, *pou-*, and *bou*. Others exist for *pe* and *pē* but not, as far as I am aware, for **pū*. As the date at which Greek fronted the /u/ to become /ü/ or /y/ is uncertain, the distinction between *pou-* and **pū-* is not absolute. Therefore, a relatively good parallel to the proposal that

the Hebrew *Pîṭōm*, could be matched by a Greek *Πῖθών* can be found in the case of Pr B3stt being rendered *Pi beset* in the Bible and Boubastis in Greek.¹¹⁴

The name Pr Tm derives from the temple and cult of Atum discussed in Chapter 9 as a possible origin for Potamos.¹¹⁵ The nineteenth-century Egyptologist Eduard Naville maintained that Pr Tm was to be found at the site of Tel el Maskhutih.¹¹⁶ In his excavations there he discovered “late” inscriptions referring to worship of Atum in the form of a holy serpent, a manifestation of which was kept in a satellite shrine—Pr Qrht “house of the serpent spirit.”¹¹⁷

This archaeological evidence of a relationship between Atum and a serpent at Pr Tm only goes back the Saite Dynasty in the late seventh century BCE. The identification of Atum with serpents, however, is older and dates back at least to the beginning of the New Kingdom. In the *Book of Coming Forth by Day*, Atum declares that with the destruction of the earth he will turn himself into a serpent.¹¹⁸ In *Black Athena Writes Back* I quoted the Swiss Egyptologist Eric Hornung: “Atum is the god ‘who in the beginning was everything,’ complete in the sense of being an undifferentiated unity and at the same time nonexistent because existence is impossible before his work of creation.”¹¹⁹

Further on in his work on the “Ouroboros,” the snake with his tail in his mouth, an image which was popular after the Amarna period, Hornung refers to the “primeval god who outlives the existent world and changes into a snake at the end of time . . . the complete circle of the snake’s body illustrates—so far as it is possible to depict it—the nonexistent which encompasses the world on all sides.”¹²⁰

In these passages Hornung relates the Ouroboros to Apopis, the evil serpent who attacks the sun every day and is daily defeated by Ra and Horus. In the earlier passage, however, he makes it clear that Atum was also both “to be and not to be.”¹²¹ Thus, the snake could represent both evil and infinity. Deriving the Python from Pr Tm would indirectly explain the evil serpent who is defeated by the heroes of the sun in an almost worldwide myth.¹²² That Atum was beyond time does not necessarily mean that he had prophetic powers. Indeed, while we have records of oracles of other Egyptian divinities, Atum has none. Nevertheless, the Egyptian ambiguity between Apopis and Atum explains that at Delphi Python fought with Apollo and the prophetic Pythia who interpreted the oracle.

A Latin name for Pr Tm, Pithona Civitas—mentioned in Chapter 9—indicates at the very least that some people in antiquity saw a connection between Python and Pr Tm.¹²³ Although this connection does not provide conclusive evidence, it strengthens the phonetic and semantic case for the identification.

If Pr Tm with its ophic cult is the origin of Pūthō and its Python, an uncomfortable association rises between Artemis, the helper of the young sun god against the enemy Apopis, and Atum, divinity of the waning sun and eternal serpent. Furthermore, the key figure in the Apolline cult at Delphi was the Πυθία, and Pythia was also an epithet of Artemis at the oracular cult of Apollo Didymos near Miletus.¹²⁴

Pythia provides a link between the god's helper and the female monster who continues to haunt the scene after the male serpent-dragon has been killed. According to the Homeric *Hymn to the Pythian Apollo*, the dragoness in the mountains behind Delphi carried wayfarers off to their doom.¹²⁵ The hostile **Λαπίθαι** and **Φλεγυαι**—the plausible Egyptian origins of these names were given in Chapter 9—appear to have represented local resistance to new settlers.¹²⁶ Thus, they were more legendary than mythical. Other demons were depicted as animals, including the **Σόβαρις** and the **Λάμια**. The derivations of these names from the Egyptian *sb3 “hyena, jackal” and the Semitic *labiṣ “lion, wildcat” were discussed in Chapter 15.¹²⁷

Even if this connection between the wild Pythia and lions cannot be sustained, Fontenrose sees another link between her and the Theban Sphinx. He claimed that the *Hymn to the Pythian Apollo* describes a contest between the monster and her victims similar to the riddle the Sphinx asked all passersby.¹²⁸ The Sphinx riddle is also similar to the riddling oracular statements of the Delphic Pythia.

The Sphinx

The distinction between the Babylonian and Canaanite conception of evening as female, on the one hand, and the predominant Egyptian picture of the same time as male, on the other, is paralleled by the iconography of sphinxes. Our image of sphinxes is essentially shaped by the Great Sphinx of Giza but this massive carving is very different from sphinxes of the Second Millennium. An example with wings exists from

the Old Kingdom, and from the turn of the Second Millennium this type became the norm not merely in Egypt but in Babylonia and Syria as well. The great increase in the number of sphinxes in the Hyksos period suggests that, like the similar griffin, the sphinx had become a symbol of the mobile and voracious invaders.¹²⁹ Wallis Budge attributed the relative lack of references to sphinxes in Egyptian religious texts to a perceived connection between the mythical beast and hated foreigners.¹³⁰ An association with the Hyksos could explain why the Giza monument had been neglected a long time (over a century?) before Tuthmosis IV restored it.

Like the griffin the sphinx does not appear in Crete until the end of the ceramic period, Middle Minoan II, just before the Hyksos invasion proposed according to the Revised Ancient Model. The sphinx became a popular motif in Middle Minoan Crete and Mycenaean Greece. Around the Aegean, as in the rest of the eastern Mediterranean, sphinxes were increasingly represented as female in the second half of the Second Millennium. This iconography fits neatly with the monster's role in the Kadmean myth cycle.

According to the mythographer Palaiphatos, the Theban Sphinx was Kadmos' first wife. She was supposed to have run off to Φίκτιον, or the Sphinx Mountain, northwest of Thebes and to have harried the city from there. Other writers disagreed about her location. Euripides placed her in the Kadmeia, the royal palace.¹³¹

Interestingly, Sophokles put Artemis in the same spot, above the Agora. Pausanias described a temple to Artemis on the same site; in front stood a stone lion.¹³² According to Plutarch, altars to, and statues of, Artemis were in every marketplace in Boiotia and Lokris.¹³³ Furthermore, large stone lions have been found at Thespiiai and at Khaironeia, where they commemorated the Theban dead. Then at the precinct of Apollo, at his (and Artemis') birthplace Delos, is a seventh-century avenue of lions.¹³⁴ The lion was associated with the sun and, in Greece, with Apollo. Just as B3st and Tmt were represented as the fierce lion-headed Shmt, Artemis was linked to the female sphinx.

This idea is not surprising when one considers Artemis' relationship with wild animals. She was a hunter but like Athena, with whom she was often confused, she was probably "the mistress of animals" depicted in Mesopotamian, Syrian and Aegean art. Theodore Gaster has made a plausible case linking her to the ferocious Canaanite goddess 'Anat.¹³⁵ The followers of the two, like the Bakkhai, were alleged to have been

involved in *σπαράγμός*, the tearing apart of live victims and eating them. As the chilling Ugaritic verse read:

She ate his flesh without a knife.
She drank his blood without a cup.¹³⁶

These characteristics, the names of Kadmos and Europa and the feminine gender of both the lion-monster and the evening indicate strong western Semitic influences on the Theban myth cycle. On the other hand, many Egyptian features also appear: the names Apollo, Artemis, and Sphinx and the relationship of solar deities with the lion. Furthermore, the riddle of the Theban Sphinx has clear parallels with that of the Great Sphinx of Giza:

What is it that has one voice and yet becomes four-footed and two-footed and three-footed?

To which Oidipous' answer was

Man, for in infancy he crawls on all fours and in old age he supports his steps with a staff.¹³⁷

Frazer saw the riddle as worldwide and, among other parallels, quoted one from what is now Zambia:

What is it that goes on four legs in the morning, on two at midday, and on three in the evening? answer a man. . . .¹³⁸

It is interesting that Frazer, who also quoted a similar riddle from Mongolia, did not refer to the following example, a more relevant parallel in the *Myth of Ra and Isis*, in which Ra says:

I am Hpr̄ in the morning, I am Rē̄ at noon and Tm in the evening.¹³⁹

The waxing and waning applies as well to the strength of the sun over the day as to the life of man.¹⁴⁰ Thus, despite the differences of gender and appearance the Egyptian and Greek sphinxes were undoubtedly closely connected.

The mixture of Canaanite and Egyptian influences in the myths of the foundation of Thebes and of the Theban sphinx, fits well with many other aspects of Boiotian and Theban culture discussed elsewhere in these volumes.¹⁴¹

Delphi, womb, dolphin and others

A cluster of words central to the cult of Apollo derives from Afroasiatic, probably Semitic but possibly also Egyptian. It is the series listed by Chantraine under one heading: **δέλφαξ** (5) “sow”; **δελφίς**, **δελφίνος** (5) “dolphin”; **Δελφοί** (H) “Delphi,” city of Apollo and the oracle; and **δελφύς** (4) “womb.” Linked to the last is **ἄδελφός** (H) “brother.”

Δελφίς, and **Δελφοί** have Aeolic variants **βέλφιν** and **βέλφοι**. There were also the Boiotian forms **βέλφος** and **βέλφης**. On these grounds, Chantraine and Frisk agree that **Δελφίς** derives from a labiovelar and they extend this conclusion to **δελφύς**. Frisk mentions the Aeolic **βέλφοι**, although Chantraine uncharacteristically omits it. Neither make the obvious next step of proposing that the city name too comes from a labiovelar.

One reason for accepting a labiovelar origin for **δελφύς** without a parallel ***βελφύς** is that there appear to be Indo-European cognates for the latter in the Avestan *garəbuš* “young animal” and the Germanic *kalb* “calf.” These possible cognates would not of course explain the other words in the apparent cluster—especially Delphi. The city name has other interesting dialect variants: **Δαλφοί** is relatively easy to explain either as the original form or, more likely given the general consistence of /e/ in all the other words, as a back formation. More interesting is the form **Δολφοί**, which could be explained as a result of rounding a labiovelar. Given this and **βέλφοι**, it seems overwhelmingly likely that the city name and the whole cluster derive from a labiovelar form **g^wəlf*.

An equally intriguing verbal cluster is found in Afroasiatic, or at least in Semitic and Egyptian. In Ge'ez there is a form *q^wəlf* “bolt” and in Tigrinya and Amharic *q^wälläfä* “lock.” In Arabic there was metathesis: *qaffala* “lock.” Tigre has the two forms *qäffäla* and *qälläfa*. The meaning “lock” could be extended. In the Gurage language of Wolane, *qulf* can mean “a long beam of wood extending from the main house to the medium-sized house with which one may secure the door of the medium-sized house.” In the same language *qulf* can also mean “return visit of a bride to her parents a few months after the wedding” indicating “the joining of her parents.” In Amharic (*tä*) *q^wälläfä* is “join or buckle together.”¹⁴²

As mentioned above $\sqrt{\text{qlp}}$ appears to be an Afroasiatic root, although the Cushitic words of this type could be loans from Semitic. Also, however,

the Egyptian *q3b* “double, double over, intestines” appears to be related to the Semitic forms. Canaanite has a root $\sqrt{qrb}$ *qereb* “inward part, entrails.” On the other hand, there is a similar Semitic root $\sqrt{kpl}$ “double, folded double.” In Arabic *kafal* is “a pair of buttocks etc.” A Canaanite passive participle *kāpul* would seem to be the origin of the Latin *copula* “link, chained together” hence the French and English “couple.” Ernout and Meillet see *copula* as coming from *co-apiō “join with.” They cannot explain the /l/.

How can the varied meanings of the two clusters $\sqrt{qlp}$ and $\sqrt{kpl}$ be matched? The essential connection is “link.” This could be either the link between twins or the bond between the womb and the child. Indo-Europeanists have long puzzled over why the Indo-European root *bhrater “brother,” so strongly attested throughout the family, should have been replaced in Greek—as brother in the narrow sense—by ἀδελφός. Φρατήρ in the broad sense of “kinsman” remained in use. Chantraine explains the *a-* in *adelphos* as coming from the Indo-European *sm̥ “same,” δελφύς “womb” first attested in medical works of Hippocrates in the fifth century BCE. No Indo-European etymology has been proposed for *delphus* itself. Greek anatomical terms are uncertain and there are at least two other words for womb: γαστήρ, generally “belly” but sometimes the organ in which a woman “carries a child” and, second, ὑστέρα “uterus.” In any event, physical linking, often by a cord, is very important in the meaning of nearly all the terms containing *delph-*, and birth necessarily involves attachment to an umbilical cord.

In Greece Ὀμφαλοί “sacred stones” were sited in a number of cult places and have been associated with Mycenaean tombs. The most famous example of an omphalos was that associated with the cult of Apollo at Delphi. In antiquity it was supposed to signify the center of the earth. Nevertheless, *omphalos* also means “navel” and it is interesting to note that at Delphi the stone was sometimes decorated with what was supposed to be the skin of the Python Apollo had killed.¹⁴³ This clearly had many symbolic meanings but one was that of an umbilical cord.

The association with birth and connection by cord is central to nearly all the words and names associated with *delph-*. To begin with *delphus* “womb,” it was axiomatic in Greek medicine that the womb, *hystera*, floated throughout a woman’s body causing “hysteria” and needed to be stabilized or tied down.¹⁴⁴

Delos

The idea of a floating womb that needs to be stabilized has an interesting parallel with the island of Δῆλος, the legendary birthplace of Apollo and Artemis. Despite the vowel difference—/ē/ (/ā/ in Dorian) as opposed to /e/—it seems likely that the island's name is a reduced form of δελφύς. The three major texts on the birth of Apollo on Delos are (1) the Homeric *Hymn to the Delian Apollo*, (2) fragments of Pindar's *Hymn to Zeus* and another *Paean* and (3) the *Hymn to Delos* by the Hellenistic poet, Kallimakhos. The later texts elaborate on the story told in the earliest. Some of the more recent texts come from the poets' originality (and desire to be original); others are derived from ancient sources.

All three texts treat the puzzle of why such a small and barren island should have become the glorious birthplace of Apollo and Artemis. The gist of the Homeric hymn is that Λητώ, impregnated by Zeus and pursued by ill-willed Hera, searched for a place to give birth to her twins. A list of prosperous islands refused through fear. Finally, she reached Delos. Given voice, the delighted Delos was frightened that she might be submerged and made Leto swear to protect the island and make it rich and famous. After being delayed by Hera, Eilithyia, goddess of childbirth, finally arrived and Leto immediately gave birth on Mount Kynthos, while holding on to a palm tree and by the stream 'Ινώπος. The derivation of Eilithyia from the Semitic root *[>]Elat "goddess" was proposed in Chapter 11.¹⁴⁵ A possible Egyptian etymology of Kynthos was given in Chapter 10.¹⁴⁶ As far as I am aware, no scholar has tried to explain the toponym Inōpos. A clue is provided by the insistence that the divine births took place close to the stream.¹⁴⁷ This assertion suggests an Egyptian etymology from inpw "royal children." Its vocalization is not known, but what appears to be a homonym, inpw the god Anubis, was rendered Anūp in Old Coptic and Anoubis in Greek. A long back vowel in the second syllable is suggested.

Pindar enlarged the story with the claim that Delos was only the "mortal" name of the island, the immortal one was Ἀστερία "star." She was supposed to have been a nymph who fled Zeus from the heavens to become a floating island. Hesiod mentioned Asteria as a sister of Leto, an explanation that makes sense since Leto "the veiled one," or night, should be related to Asteria the star.¹⁴⁸ This could explain Leto's choice of the island. Kallimakhos systematized the traditions of the Homeric hymns and Pindar. He saw Asteria as the earlier name of the wandering island

and Delos as the name of the island after it was fixed by four columns from the earth, to allow the birth of Apollo.¹⁴⁹ This has Egyptian resonances in that in some of the most ancient traditions the sky was fixed and supported by four pillars  (N3ox) on the cardinal points.¹⁵⁰ At Delos the fixture was supposed to be so complete that, unlike the surrounding Cycladic islands, it never suffered earthquakes. Even so, anxiety about earthquakes did exist; Virgil refers to Apollo having: “found it [Delos] drifting about the sea from coast to coast; and, since it was his birthplace, in loyalty to his mother he chained it firmly to High Mykonos and Gyaros.”¹⁵¹ Why he should have mentioned the tiny island of Γύαρος, more than fifty kilometers from Delos, is puzzling. Mention of Μύκονος, less than two kilometers away, is not surprising. Indeed, Mykonos has a very plausible etymology, suitable for the myth, from the Semitic root $\sqrt{\text{kwn}}$ “be firm” with the locative prefix m- vocalized in Hebrew as *məḵōnāh* “fixed resting place, base.”

Even closer to Delos than Mykonos, across a strait of only 700 meters is the island of ‘Ρήνεια, ‘Ρήναια or ‘Ρήνη. It was also sometimes known as ‘Ορτυγία “quail island.” According to the Homeric hymn however, Artemis was born in Ortygia, which was distinguished from Delos. Strabo maintained that Ortygia referred to Rheneia.¹⁵² The idea that Delos was the birthplace of Apollo and Ortygia/Rheneia was that of his twin Artemis could explain why in the late sixth century BCE Polykrates, tyrant of Samos, set up a chain linking the two islands, ostensibly offering Rheneia to Apollo.¹⁵³ Another reason could be the need to stabilize Delos. Polykrates’ actual chain may have been the inspiration for Virgil’s myth of a chain tying Delos to Mykonos.

There are a number of plausible Egyptian etymologies for the name Rheneia. From a phonetic point of view the best is from *rny* “calf.”¹⁵⁴ The Coptic *roūne* indicates an earlier diphthong including /ā/. A form *rā?ne corresponds well to the Greek Rheneia. Naming a smaller island that is close to a larger one “calf” is not uncommon; see, for instance, the Calf of Man off the Isle of Man. Thus Rheneia, although bigger than Delos, could be the “calf of Mykonos.” *Rny* belongs to a larger cluster *rn with the general meaning “young.” With different orthographies *rnn* can mean “rejoice, caress, bring up, nurse”  (B6) and *rnt* is “(wet-) nurse.” *Rnnt* is the nurse goddess.” A toponym from this source is suitable for the birthplace of a goddess.

Many scholars have discussed an Egyptian parallel to the myth of Delos, a “floating island” χέμμις where Apollo and Artemis were born.

Herodotos explained that in Egypt Apollo is Horus and Artemis was Bubastis.¹⁵⁵ The modern scholar Peter Bing differentiates between the two traditions; he points out that in the Egyptian version the island only begins to float once the divine children are born, whereas their birth stabilized Delos, which had been floating. Bing agrees, however, that there are many other Egypto-Greek parallels between the two traditions. Some of these first appear in Kallimakhos' poem and, therefore, can be explained as attempts to please his Ptolemaic patron. Other parallels are more difficult to dismiss. The image of Leto giving birth while holding on to a palm tree—possible but unlikely on a bare Cycladic island—appears in the Homeric hymn.¹⁵⁶ It is also interesting to note that Kynthos, the name of the mountain on which the divine twins were born, can be plausibly derived from K3 ntr.¹⁵⁷ It is also possible, as claimed above, that the river Inopos had an Egyptian etymology. There is no attestation before Kallimakhos of the idea that the Inopos was directly linked to the Nile. After his poem such ideas are quite frequent.¹⁵⁸

The approximate resemblance of two such intimately connected toponyms as Delphi and Delos makes a common origin extremely likely. The same is true of the word *delphus* "womb," which was both "the organ tied down" and the source of the umbilical cord. The idea of linkage between a small and large also helps explain *delphax* "sow" with her suckling piglets. The suffix -ax is used for animals and inferior humans. The origin of *Delphis*, *Delphinos* is much more difficult to find. One possibility is that it was related to a pig because of its pig-like snout. In both Sumerian and Akkadian, the name for the constellation Delphinus was "pig."¹⁵⁹ Finally, there is δάφνη (H) the laurel sacred to Apollo. The inability to find an Indo-European root and the wide variety of dialect forms lead Frisk and Chantraine to describe it as an "unexplained Mediterranean word," although one variant, λάφνη, encourages them to see a relationship to the Latin *laurus*. Given the cultic connections, Daphnē would seem more likely to be a metathesized derivation from *delph.

Conclusion on Apollo and Artemis

Apollo was a god of the rising sun, rebirth, apotheosis and healing; Artemis was the divinity of sunset, nightfall, hunting and, later, childbirth. They demonstrate the complexity of eastern Mediterranean religion in the Bronze and Early Iron ages. Some aspects appear to be purely Greek: the emphasis on the twins' archery and Apollo's traveling by

chariot—whereas Horus, Hpr̄r and Tm sailed across the sky by boat. Other features indicate Semitic influence: epithets such as Ismenos with its links to healing; the river name Ladon; the important root *qʷʰlʃ*; the name Leto, the unaspirated version of the name Apollo and the fact that the divinity of sunset was female.¹⁶⁰

The basis of these two divinities, however, was Egyptian and included the three phases of the sun; the names Apollo and Artemis, Kynthos and Inopos; the floating island; and links to healing and revival, as well as to lions and the sphinx. There are also the connections to childbirth, apotheosis and music discussed in Chapter 10. The result of this gallimaufrey is not merely confusing but splendidly rich.

OTHER OLYMPIANS

In earlier chapters I discussed the name Aphrodite; those of Hermes and Athena will be considered later.¹⁶¹ Ares' name does not appear in Linear B, but Enuwarijo, **Ἐνυάλιος** a god of war later confused with Ares, is attested. Frisk states, "Pre-Greek name of unsure formation and unknown etymology." Chantraine agrees. The etymology, like that of the warrior goddess **Ἐνυώ** is, in fact, obvious. It comes from **in hrt**, later known as Onuris, the Egyptian god of war.¹⁶²

The name **Ἥφαιστος** does not appear in Linear B, but Ventris and Chadwick plausibly suppose that man's name Apaitijo is derived from it.¹⁶³ Chantraine describes the etymology of Hephaistos as "particularly obscure." Hephaistos' Egyptian counterpart or prototype as craftsman god was Pth Ptah.¹⁶⁴ The metathesis ***Hpt** would fit nicely with (H) Apaitijo, although the /s/ in Hephaistos offers some difficulty. In general, I would not accept this metathesis. In this case, however, the tight semantic fit and the possibility of religious taboos or alternations make it permissible.

This name does appear in the correct consonantal order in Pausanias' description of the ancient sanctuary of Apollo at Troizen mentioned earlier in this chapter. According to legend, the sanctuary was built by **Πιτθεύς**, Pittheus a son of Pelops, who came from Elis to rule Troizen. In Egypt, Ptah, as well as Atum, was paired with the lion goddess, Sekhmet whose Greek counterpart was Artemis. A temple to the latter was found in the marketplace at Troizen. This temple had altars to the gods of the Underworld. At Memphis, the trinity Ptah, Sokaris and Osiris were seen as the gods and judges of the Underworld. In connection with the altars,

Pausanias referred to Osiris' Greek counterpart Dionysos. He went on to describe the "tomb of Pittheus" behind this temple, on which stood "three chairs of white marble. They say that Pittheus and two men with him sat as judges on these chairs."¹⁶⁵ He continued: "Not far off is the is a sanctuary of the Muses: They said it was made by Ardalus son of Hephaistus. . . . Here they say that, Pittheus gave lessons in the art of rhetoric. I have myself read a book by a man of Epidauros, which purports to be a treatise by Pittheus."¹⁶⁶

In Memphite theology Ptah was worshipped for having given life to the other gods through his tongue and command of speech. An association of Ptah with the tongue is also made in the *Book of Going Forth by Day* and "writings" may also have been associated with the god.¹⁶⁷

ZEUS NSW

The identification of Zeus with Am(m)on certainly goes back to the fifth century with the striking phrase attributed to the poet Pindar: "Ammon lord of Olympos." In fact the close links between the ancient oracle of Zeus at Dodona and those of Am(m)on at Siwa and Thebes suggest that the identification of the two gods was far older.¹⁶⁸

In the section on Zeus in his *Greek Religion* Walter Burkert pinpoints the discrepancy between the name and nature of Zeus:

Zeus is the only name of a Greek god which is entirely transparent etymologically, and which indeed has long been paraded as a model case of Indo-European philology. The same name appears in the Indic sky god *Dyaus pita*, in the Roman *Diespiter/Juppiter*, in the Germanic Tues-day, and the root is found in the Latin *deus*, god, dies, day and in the Greek *eudia*, fair weather. Zeus is therefore the Sky Father, the luminous day sky Only for Greeks and Romans is the Sky Father the highest god, and he is so primarily as a rain and storm god: Zeus is much more a weather god than the etymology would suggest.¹⁶⁹

Furthermore, Zeus and Jupiter are royal gods while the Hindu Dyaus pita, and the Teutonic Tiwe are unimportant members of their panthea.

At this point it is useful to note that this Greek god had two major names: **Δίος** and **Ζεύς**. Chantraine sees these names as resting on two themes: (1) *dei-w- from which the Latin *diuos* and the Sanskrit *devá* (and

of course the Greek Dios) (2) *dy-eu, *dy ēu- from which he derives Zeus. There is no doubt about the first theme, the second and the connection between *diwe* and Zeus are much more conjectural.

As Herodotos did not include Zeus among the divine names of non-Egyptian origin, one should seriously consider an Egyptian etymology. It is striking to note that Zeus was not equated with the Egyptian Ra, god of the bright sun in the sky, but with Amon the royal god, identified with oracles, rams and thunder.

The image of Amon as royal god was linked to Thebes as the national capital. Thus it is attested in the Twelfth Theban Dynasty and again in the Eighteenth, when the title Nsw Ntrw “king of the gods” is attested.¹⁷⁰ Nsw<Nzw on its own provides an excellent etymon for Zeus. The Greek form Αμωναϑωνθηρ AmonRa-sōnthēr shows that the initial n- in nsw was dropped, though it may possibly have voiced the following sibilant to become /z/ (nthēr is the Coptic plural for “gods.”)¹⁷¹ Although in this rendition the -w became an -ō, in Chapter 6, when discussing the derivation of the suffix -eus from the Egyptian -w, I took up Albright’s argument that in Egyptian /ū/ could epenthesize to /eū/.¹⁷² This shift appears to have occurred at the end of the Second Millennium, which would be when the name Zeus was introduced. There is no mention of this name in Mycenaean texts, while the Diwe is present and his pairing with Hera/Era confirms the obvious connection not only with the later Dios but also with the later Zeus.¹⁷³ The situation is further confused by other names for Zeus: Ζᾱν, accusative Ζῆν(α). This name can plausibly be derived from the Canaanite term for “small cattle, sheep and goats— $\text{ṣo}^{\text{ṛ}}n <^* \text{ṣa}^{\text{ṛ}}n$. Both Amon and Zeus were identified with rams.

The least unlikely explanatory scheme is to suppose that in Mycenaean times a god had the characteristics of Amon but, like the latter, the name means “hidden.” He had a secret name and was simply called by the Indo-European Diwe “sky, god.” At some point at the end of the Bronze Age the Egyptian name *Zeu, which resembled Diwe, and the Canaanite * $\text{ṣa}^{\text{ṛ}}n$ were introduced and merged with Diwe to form the confused and varied declensions found in different dialects.

OTHER GODS

In earlier chapters I have provided Egyptian etymologies for other gods, including Πλοῦτος, Ἄιδης and Δάειρα.¹⁷⁴ In Volume 2, I proposed to derive the name of the old crone goddess of magic Ἐκάτη from the

Egyptian frog fertility goddess, Ḥqt, with possible influences from Ḥk3w “magic.”¹⁷⁵ According to an Akkadian transcription, the name of Ra’s female partner **R’t** was pronounced Riya. This makes it a good candidate to be the etymon of **ῚΡέα**. The difference between R’t as a solar or sky goddess and Rhea as a chthonic divinity associated with caves is reconciled by R’t’s attested identification with the sky goddess Nwt. It should be noted that Nwt’s stellar figure was painted on the ceilings of tombs and coffins covering the second birth of the dead person, just as Rhea protected the young Zeus. In Hellenistic times, Rhea was identified with Nwt.

For the derivation of the name **Πᾶν** from ***p3 im** “the groan” and other sources, see the appropriate section in Volume 2.¹⁷⁶ See also the Egyptian etymology of **ῚΑτλας** and the possible Sumerian one of **ῚΩκεανός** there.¹⁷⁷ The Egyptian etymologies of **Οὐρανός** and **Κρόνος** have been given in earlier chapters.¹⁷⁸

HERODOTOS’ NON-EGYPTIAN DIVINE NAMES

Herodotos’ statement that “the names of *nearly* all the gods came to Greece from Egypt” is made more plausible by his list of exceptions: Poseidon, the Dioskouroi, Hera, Hestia, Themis, the Graces, and the Nēreids. Hestia, Themis and the Graces have clear Indo-European etymologies. Dioskouroi means merely “divine youths.” Thus, although *kouros* was a very early loan from Egyptian, the combined form Dioskouroi can fairly be described as Greek.¹⁷⁹

In Volume 1, I proposed that the name Poseidon was a mixed form with the Egyptian prefixes **p3-** “the” or **pr-** “house” and the West Semitic city name **Sidōn** derived from the name **Ṣid**, god of hunting. This proposal is uncertain but I have yet to see a more convincing one.¹⁸⁰ Volume 2 further considers Poseidon as a god of oases and chariots.¹⁸¹ I discussed the Semitic origin of Nēreus and the Nēreids in Chapter 14.¹⁸² This leaves the name Hera, which with those of the related *hero*, was discussed in Volume 2.¹⁸³

Other divinities not among those listed by Herodotos as non-Egyptian have more or less clear Semitic origins. These include Gaia and Demeter, as discussed in Chapter 5; Eileithyia discussed in Chapter 11; and Hermes discussed in Chapter 21.¹⁸⁴ Chantraine writes about the divine name **ῚΑιδης** “many uncertain hypotheses which there is not

space to repeat.” Hades the punishing god of the Underworld has a reasonable derivation from the Mesopotamian and Syrian god Hd(d) Hadad “storm god” or “thunderer.” The derivation of **Ἄδωνις** from the Semitic ʾĀdōn, “lord” has been universally accepted.¹⁸⁵

DEMIGODS

In Volume 1, I proposed that the “noble” **>ʾIrpt** rendered **Ὀρπαις** in Greek together with the suffix -εύς (from the Egyptian -w) made up the name **Ὀρφεύς**.¹⁸⁶

The link between the Egyptian **ʿntyw**, a form of Seth, and Herakles’ opponent **Ἀνταῖος** was established in Volume 2.¹⁸⁷

In the first book of the *Iliad*, Achilles refers to the triumph of his mother Thetis in rescuing Zeus by calling up to Olympos “him of the hundred hands . . . **Βριάρεως**,” who defeated the combined forces of Hera, Poseidon and Athena.¹⁸⁸ In addition to the one hundred arms, Hesiod granted him fifty heads as well as great power.¹⁸⁹

In Chapter 10 there was a discussion of the Egyptian **b3**  (G29) “soul-bird.”¹⁹⁰ The plural **b3w** had the special meaning of “souls of the dead, world soul, power, strength.” It was sometimes written as b-3-w with the divine determinative  (A40). It was, usually, simply  (G30). The likelihood that this form was also sometimes pronounced *b3w is increased by the attestation of a word **b33wt** “virility.” Even *b3(y)3w or *b33(y)w are made possible by the attestation of the form **b3yw** “Ba-like creatures.” The Demotic *by* and the Coptic *bai* also suggest the presence of a front vowel.

Divinity, strength and above all, multiplicity provide an excellent semantic correspondence of **b3(3)w** with *briareōs*, enough to overcome the phonetic difficulties.

The origin of the name **Ἰναχος** “king and river” from **ʿnh** was discussed in Chapter 10.¹⁹¹

The obvious derivation of the **Κάβειροι** from the Semitic Kabir “great, noble” seen by Scaliger and Bochart, but denied by mainstream classicists since K. O. Müller is discussed in Volumes 1 and 2.¹⁹²

The Egyptian origin of the **Μοῖραι** was discussed in Chapter 10, as was **Νέμεσις**, in Chapter 12.¹⁹³

In Volume 2, I discussed at length the derivation of **Μίνως** from the Egyptian Mn.¹⁹⁴ I also derived the name of his brother **Ῥαδαμάνθυς** from *Rdi Mntw “Mntw gives” or “has given.”¹⁹⁵ In his criticism of my

work John Baines argued that Mntw was “a second rank Egyptian deity” restricted to the Theban nome in Upper Egypt and, therefore, could not have had significant influence on the Aegean or specifically on Crete.¹⁹⁶ I responded by reiterating that Mntw was the patron god of the Eleventh Dynasty, of the pharaohs named Mntw ḥtp who arose in that district. The famous Tōd Treasure of trophies from the north made by pharaohs of the succeeding Twelfth Dynasty was found in the temple of Mntw. The Eleventh Dynasty ruled during the decades around 2000 BCE when the Cretan palaces were founded.¹⁹⁷

In Volume 2, I gave grounds for identifying **Ὀγκα** the biname of Athena at Thebes, near the Ladōn “dragon” river, with the Egyptian goddess **ἡqet** who was later rendered Anukis goddess of the cataracts.¹⁹⁸ Since writing this, I have found that Apollo at the irregularly gushing waters of the Ladōn near Thelpousa in Arkadia was known as **Ὀγκειάτας**.¹⁹⁹

Also in Volume 2, I derived **Πήγασος** (H) from three Egyptian sources *pgs* “to spit out,” **p3 ghs* “the gazelle” and *gs* “speed.”²⁰⁰ Looked at from an Afroasiatic perspective the last two can be derived from the related roots **gas/*gus* “move” and **gaso* “antelope” attested in the Old Egyptian *gs3*. Michael Astour has set out in great detail the Semitic (Aramaic) origin of **Βελλεροφών** from **Beʿel rp>(n)* “Baal of healing.”²⁰¹

MYTHICAL CREATURES

Monsters and enemies

The Egyptian or Semitic derivations of **Λαπίθαι**, **Φλεγναι**, **Σόβαρις** and **Λάμια** have all been discussed earlier in this chapter.²⁰² In Chapter 10, I proposed Egyptian etymologies for **Κένταυροι** and **Σάτυροι**.²⁰³ The Egyptian derivation of Gorgon will be set out in the last chapter. **Φόρκυς** was seen as a sea god, or the old man of the sea, spirit of the deep and flux, and a monster and the father of monsters. Phorkys has no Indo-European etymology but can plausibly be derived from *p3 w3hi* “the flood.”²⁰⁴

Minor goddesses: Nymphs and Muses

The Egyptian names of Zeus’ paramours include **Ιώ** discussed in Volume 1, and, in Volume 2, **Σεμέλη** from *sm3t* “royal consort” and

Αλκμήνη, from ***rht imn** “friend of Amon.”²⁰⁵ The Semitic origin of **Λητώ** was noted earlier in this chapter.²⁰⁶ Much of Chapter 11 is devoted to the extra-Hellenic aspects of the natures and names of nymphs and Muses. Specifically, there were the derivations of **Αδραστεία**, who sheltered the infant Zeus or Dionysos from **Drt ndst**; “lesser kite” a biname for Nephtys who mourned for and revived Osiris; and the horned **Ἀμάθεια** from **im3t** “female ibex.”²⁰⁷

SOME HEROES

The complexities surrounding the name and nature of Herakles and of the word *hero* itself were discussed in Volume 2.²⁰⁸ The possible Semito-Egyptian derivation from ***ahī rw** “my brother is a lion” of **Ἀχιλ(λ)εύς** was set out with **Πηλείων** ***p3 rw** “the lion.”²⁰⁹

I discussed the rich cluster of Egyptian and Semitic roots behind the name **Δαναός** in Volume 1.²¹⁰

The derivation of **Ἐνδυμίων** from the Egyptian **ndm** “sweet” was proposed in Chapter 12.²¹¹

The attested personal name **Ddw mnw** “whom Min gives” provides a reasonable etymology for **Ἰδομινεύς** (Idomenijo in Linear B) prince of Crete and grandson of Minos.²¹² The clear, although complex, relations between the Cretan Minos and the African Min are examined in some detail in Volume 2.²¹³

The origin of the name **Θησεύς** from the Egyptian **ṯsw** “commander” was set out in Chapter 5.²¹⁴

Κάδμος and the name’s clear derivation from the Semitic root **√qdm** have been mentioned many times throughout all three volumes of this project. The possible derivation of **Κέκρω**, founder of Athens, from the prenomena of the Twelfth Dynasty pharaohs known as Senwosret—**Hpr k3 R’ I**; **H’ hpr R’ II** and **H’ k3w R’ III**, will be debated in Chapter 22.²¹⁵ The Egypto-Syrian etymologies of **Μελάμπους** and **Μέρω** were proposed in Chapter 18.²¹⁶

Chantraine subsumes the name **Νεστωρ** under the verb **νέομαι** “to return.” He plausibly derives this from a form ***νέσομαι** for which, with even less certainty, he finds an Indo-European root. All that we know about Nestor from tradition is that his father was called **Νηλεύς** and that he reigned for two to three generations at Pylos and in his old age went on the Trojan expedition where with more or less success he acted as a bore and peacemaker. Unlike the other Greek heroes, he returned

home without too much difficulty, hence the possibility of linking his name with *neomai*. Nēleus closely resembles Nēleus, god of the sea, whose Semitic etymology was discussed in Chapter 14.²¹⁷ Another origin for Nestor could well be from the attested Egyptian title Nst wr “great throne.”²¹⁸ Such a title would have been appropriate for Pylos; we know from the Linear B archive a rich and powerful state existed there in the thirteenth century BCE.²¹⁹ Furthermore use of an office as a title is frequent and as a title rather than a person, it would explain Nestor’s longevity.

The derivation of Ὀδυσσεύς from wdyt “expedition” was referred to above.²²⁰

CONCLUSION

This chapter is an attempt to vindicate Herodotos’ statement quoted at the beginning: “The names of nearly all the gods came from Egypt.” The fact that the exceptions to his list have reasonable Indo-European or Semitic etymologies make his claim all the more plausible. The focus of this chapter has been on inexplicable, mysterious mythological and legendary names and, thereby, neglects those with sound Indo-European etymologies. Nevertheless, I believe, that this chapter enables us to go beyond Herodotos’ claim for the gods and show that the majority of other names found in Greek mythology and tradition are primarily Egyptian and secondarily West Semitic.

CHAPTER 20

GEOGRAPHICAL FEATURES AND PLACE-NAMES

INTRODUCTION

Place-names are, if anything, more durable than words. They can tell one as much or more than language about both prehistory and history. Unlike other words, they often survive the disappearance of the languages that formed them. Their linguistic provenance can provide important evidence on the languages of the populations or rulers in the distant past. In the United States and Canada, for instance, eighteen states and three provinces have names not amenable to analysis in any European language. As they stretch from Quebec and Massachusetts in the east to Utah and Idaho in the west, one could deduce—without historical or current linguistic evidence—that Pre-Columbian populations existed across North America before the arrival of Europeans. On the other hand, four states in the Southwest (California, Nevada, Colorado and Montana) and one in the Southeast (Florida) have Spanish names indicating Spanish settlement, or at least influence, in these regions.

Typically, however, political names are less conservative than those of natural features or even than those of towns and villages. In England, apart from London and those to which the Latin *castrum* was attached, very few Celtic town names remain. Nevertheless, the most frequent river names—Avon, Derwent, Dart, Don, Ouse and Trent—are mainly British,

while some like the Thames (Temis) and Severn are even pre-Celtic. Both facts are striking since Britain became Celtic-speaking more than 2,500 years ago and because British (Welsh) has not been spoken in England, apart from Cornwall, for at least 1,400 years.

Absence can also be indicative. We know that England was conquered by Normans in 1066 CE and ruled by French speakers for the next three hundred years. Yet, very few French toponyms can be found; the migrations of Saxons and Danes, whose languages have provided most place-names, were far more substantial.

In the Balkan peninsula as a whole nearly all toponyms can be derived from Indo-European. Greece is the great exception—virtually none of its ancient place-names can be explained by Indo-European. For this reason classicists have almost completely given up trying to understand or write about them. No book-length study on the subject has appeared since Adolf Fick's *Vorgriechische Ortsnamen als Quelle für die Vorgeschichte Griechenlands* came out in 1905.¹ Fick's book has very little phonetic and absolutely no semantic discipline. His only detectable system was a refusal to consider the most obvious Semitic etymologies, as with, for instance, his explicit denial that the Greek river name **Ἰαρδάνος** could be derived from the Canaanite *Yardēn*, Jordan "descending river."² For Jasanoff and Nussbaum's attempt to discredit this obvious loan, see below. Since Fick's attempt and the ill-fated venture of Blegen and Haley described in Volume 1, classicists have left Greek place-names strictly alone.³

Jasanoff and Nussbaum justify this failure when they write, "names, in principle, can mean almost anything."⁴ I cannot accept this approach because I believe that, while names are often repeated simply as names, the originals nearly always had a meaning, particularly in the case of place-names. Frequently, we fail to understand the meaning of a place-name simply because we do not know, or are not aware that we know, the language from which it was constructed. Nevertheless, before supposing that a specific name derives from an unknown language we should check to see if it can be explained by one that is known and understood.

I am convinced that the reason why Greek toponymy has not progressed is that nineteenth- and twentieth-century scholars have seen these place-names as remnants of unknown, lost pre-Hellenic languages. Seldom, if ever, have they considered the possibility that many toponyms can plausibly be explained in terms of Ancient Egyptian or Semitic.

My approach here is not "undisciplined," as my critics complain. In looking for the etymologies of Greek place-names, I insist that (1) there

must be a good phonetic fit and either (2) the proposed Afroasiatic etymon should be attested as a place-name or (3) the proposed etymon should fit the physical features of the place named. Previous scholars have not considered this last criterion.

NATURAL FEATURES

Islands

As with other toponyms, island names sometimes slip from one place to another. For instance, the ancient name *Mona* once applied to the island now known as Anglesey and is now applied to the Isle of Man. The name *Thule* has shifted from Iceland to Greenland and is even the origin of *Foula* in the Shetlands. The insular names of the Aegean, however, are exceptionally unstable. If, for instance, one compares the Cycladic with the Orcadian archipelago the contrast is striking. In Orkney, apart from the two toponyms *Pomona* and the mainland, all the dozens of others have distinct and fixed names. In the Cyclades, as we shall see, the situation is far more fluid. The difference can partly be explained by time: the Orcadian names have been recorded for only a thousand years, whereas in the Cyclades the time depth has been three or four times as great. The other explanation is the polyglot nature of the Cyclades, where Indo-Hittite, Egyptian, West Semitic and Indo-European were all spoken, often simultaneously, for many millennia.

Before beginning to list the island names, we should consider the word **Νῆσος** (H) “island” itself. Chantraine declares that the etymology is “unknown.” The meaning of *nēsos* is not altogether straightforward. It was used for peninsulas and also for alluvium covered by the Nile. I propose a derivation from the Egyptian **nst**. This word is literally “throne,” however, in place-names it is sometimes written with the determinative 𓏏 (N36) “irrigation channel” or “irrigated land.” This form would suggest a parallel with the Nile alluvium. More to the point the plural *Nswt t3wy* was used for mountains and deserts away from the Nile.⁵ Finally, *nst* could mean “seat” in a wider sense, a town, a ruler or even a people. Thus, it provides a reasonable etymology for *nēsos*.

ISLAND NAMES. **Ανάφη, Μεμβλιάρος**. In the seventeenth century Samuel Bochart derived the name of this tiny island close to Thera, from the

Hebrew ʿĀnāp, “shady.”⁶ He based this derivation on a passage from the *Argonautica* of Apollonios of Rhodes: “[After a pall of darkness] and straightway dawn arose and gave them light: and they [the Argonauts] made for Apollo a glorious abode in a shady wood, and a shady altar, calling on Phoebus the “Gleamer” [aiglētēs] because of the gleam far-seen; and that bare island they called Anaphe. . . .”⁷ Bochart’s etymology is thus possible but no more than that. Astour derives Anaphe from the West Semitic ʾānāphā “a type of owl.”

Michael Astour is interested in the passage quoted above and an earlier one: “. . . as they sped over the wide Cretan sea, night scared them, that night which they name the Pall of Darkness: the stars pierced not that fatal night nor the beams of the moon, but black chaos descended from heaven, or haply some other darkness came rising from the nethermost depths.”⁸ Astour is concerned with the name **Μεμβλιάρος**. Herodotos described this personage as a Phoenician related to Kadmos who had settled in Thera, then called Kalliste. His descendents had lived on the island for eight generations before the arrival of the legendary Theras, the eponym of Thera.⁹ Astour argues on the basis of a statement from Stephanus of Byzantium that originally Membliaros was not a person but the old name of Anaphē. On the basis of Apollonios’ dramatic picture of utter darkness, Astour derives the name from a Phoenician *Mēmbli ʾār “water without light.” He goes on to relate this to Apollonios’ description of the “pall of darkness” and to Hebrew and Mesopotamian creation myths in which god’s light spreads over the darkened chaotic waters.¹⁰

Astour’s derivation is plausible, but there would seem to be more to it. “The Pall of Darkness: the stars pierced not that fatal night nor the beams of the moon, but black chaos descended from heaven, or haply some other darkness came rising from the nethermost depths” is a good description of volcanic darkness following the Thera eruption. Thus whether Membliaros refers to Thera or to Anaphē or to both, Astour’s etymology from *Mēmbli ʾār is very plausible.

’**Απία**. The derivation of Apia, an ancient name for Argos or the whole Peloponnese, from the Egyptian Hṗ was discussed in Volume 1.¹¹

’**Αστυπάλαια, Κός**. Astypalaia is a common place-name. Stephanus Byzantinus lists five instances.¹² In Chapter 22, I shall argue later that Asty “city” derives from the Egyptian *st* “place, grounds.”¹³ As a whole,

Astypalaia is probably a hybrid with -palaia simply meaning “ancient.” Skymnos of Chios and Stephanus Byzantinus, however, mention alternative forms **πύλαιον** or **πύλαια** and, thereby, open the possibility that it is purely Egyptian.¹⁴ The Coptic *se* makes it clear that *st* was usually pronounced on its own. It was, however, frequently compounded. There is, however, no example of this with *pr**por. On the other hand, as *st* is frequently written with the determinative □ (O1) *pr*, there would be no need to duplicate it. In any event the name Astypalaia is a city rather than an island toponym. The Cycladic island may have gained its name from its capital with a striking acropolis.

Strabo stated that Astypalaia was the original name of the larger and more significant Kos.¹⁵ Stephanus says merely that it was the name of what had been the major city in Kos.¹⁶ Kos was the base of the Asklepiads, the birthplace of Hippocrates and the center of Greek medicine. Astour makes an elegant case for deriving the island name from the West Semitic *kôš* “a kind of owl.” He does this in three ways. First, he cites an argument made by Victor Bérard about two other names, **Ἀκίς** and **Μεροπίη**, both applying to the island of Siphnos. Bérard related *Akis* to the Semitic *aku* “owl” but *akos* also meant “remedy” and *akis* “recovery” in Greek. The pair formed what Bérard called a Greek/Semitic doublet.¹⁷ (In my view, the allegedly “Greek” word, in this case *akos*, is in fact derived from the Egyptian ‘q3.¹⁸) In Chapter 18, I accepted Bérard and Astour’s derivation of *Meropiē* from the West Semitic *mərappē* “healer.”¹⁹

Astour’s second argument comes from the name *Meropiē* being applied to Kos, which, as stated above, is a West Semitic word for type of owl associated with medicine. The third argument is that the legendary king of the island **Μέροψ** had a son and successor **Εὐμηλος** who became a **Νυκτικόραξ**, a “night crow.” This term was used in the Septuagint to translate the Hebrew *kôš*. Furthermore, *Eumēlos*’ daughter *Meropis* was turned into an “owl” **γλαῦξ**.²⁰ Altogether, the net is too intricate and dense to deny the derivation of the island name Kos from the West Semitic *Kôš* “owl.”

Δήλος, Ρήνεια. The Semitic origin of Delos and the Egyptian one of Rheneia were discussed in the last chapter.²¹

Ἰθάκη, Ἀττικά and **Ἰτύκη.** Three toponyms share the same syllabic structure: *VtVka **Ἰθάκη**, the Greek island and a town on the

Euphrates; Ἀττικά, the territory around Athens; and Itukē (Utica), the city near Carthage in what is now Tunisia. The meaning of the Semitic root $\sqrt{tq}$ is to “pass, supercede.” In Hebrew ʿatēq could mean “eminent, surpassing” but in Aramaic and later Hebrew ʿatīq meant “surpassed, ancient, old.” No doubt the Punic city Utica gained its name from the passive Pual form ʿūtaq “was surpassed.” It was surpassed by Carthage, Qarta ḥădāštā “New Town.”²² The existence of an Ithaca on the Euphrates strongly suggests that this toponym, which has no Indo-European or Egyptian etymology, is Semitic, but it is difficult to say whether it means “preeminent” or “ancient.”²³ The first interpretation is reinforced by Ithaca’s early dominance over Kefallenia and Zakynthos.²⁴ The last interpretation could point in the direction of “ancient” if there is any possibility that the name derived from that of the people. The same ambiguity holds for tracing the name to Attika, although “ancient” is more likely given the Athenian boasts of their antiquity and the region’s standing out from the Dorian invasion.

Ernout and Meillet want to derive *antiquus* from *ante* “in front of” but they are baffled by the final *-quo* which they admit is not an Indo-European suffix. It would seem simpler to derive it from ʿatīq . A parallel introduction of a nasal can be found in the etymology of the name Antonius from the Canaanite ʾādōnī “my lord.”

Ἰκαρος. The island of Ikaros or Ikaria is generally associated with the unfortunate Ikaros who flew too high. Another hero **Ἰκαρίος**, however, was the first planter of grapes.²⁵ He was associated with a deme of his name in Attika but also with the island of Ikaria. The city of Oinoe is famous for its grapes and in ancient times claimed to be the earliest site of wine production in Greece. The etymology would seem to be from the Canaanite ʾikkār “laborer, planter,” from the Akkadian *ikkaru* and ultimately from the Sumerian *agar* “irrigated land.”²⁶

Κρήτη. Crete is not only the largest island in the Aegean but by far the highest. Mount Ida is not merely a thousand meters higher than mountains on any other Aegean island but also, with the exception of Olympos, it is higher than any on mainland Greece. The Egyptian $q33$, $q3t$ and $q3yt$ “high, height” are all used as toponyms.²⁷ Despite the fact that there is no evidence from Egyptian texts of the name having been applied to the island, $q3t$ provides a reasonable etymology for Krētē.

Κόθηρα. The names of, and on, this island provide a classic case of Victor Bérard's principle of "doublets" two names, one Greek and one Semitic, for the same geographical feature. In Volume 1, I listed all the Semitic associations of the island, which was a cult center of the crowned Aphrodite. Bérard saw Kythēra as deriving from the West Semitic, found in the Hebrew *keter*, *kōteret* "crown," and the "Greek" **Σκάνδεια** "a kind of headdress" as the name of the island's chief harbor.²⁸ In a footnote, I pointed out that Skandeia itself derived from the Egyptian Shmty the "double crown of Egypt."²⁹ This example together with that of *akis*, mentioned above, indicates that in at least some cases the doublet is Semitic and Egypto-Greek.

Λήμνος, Λέσβος. The name Lēmnos would seem, like λιμὴν "harbor, port," to come from the Egyptian *r-mny "place of mooring." The Bay of Mydros on the island provides one of the best harbors in the Aegean. In ancient times Lēmnos had an active volcano and consequently a cult of Hephaistos.

The west of Lesbos is also volcanic, unstable with hot springs. Bérard saw volcanic signs in Lesbian toponymy. He took as a doublet, the towns of Pyrrha "fiery" and Issa, which he believed derived from the Semitic >Iš(t) "fire."³⁰ The etymology of Lesbos itself, which is generally described as "pre-Hellenic" can plausibly be derived from the Middle Egyptian *ʒsb* "fierce, glowing" and *ʒsbyw* "flames" and the form *nsb* found in the *Book of Coming Forth by Day*.

Μήλος. Stephanus stated that Mēlos was first colonized by Phoenicians from Byblos.³¹ This would certainly suggest a Semitic etymology for the name. Movers, Lewy and Astour all claim that it derives from the root √ml> "full." They back this by seeing Kallimakhos' use of a variant form Mimallis as deriving from the participle *məmalle*>.³² This might seem plausible at a phonetic level, but, semantically it makes no sense. A more likely root is √mlḥ, ultimately deriving from the Nostratic root and *√mul/mol "to rub, crush, mill."³³ The basic meaning of √mlḥ is "salt" but this has been extended in two directions: In Ugaritic and Arabic the form also has the general meaning of "good." In Arabic it is also combined with other linguistic units to name various minerals, many of which were abundant in Mēlos.

Μύκονος. A derivation of Mykonos from a Canaanite form found in the Hebrew *məḵōnāh* "fixed place, base" was proposed in the last chapter.³⁴

Νάξος. For the origin of Naxos from *nḥt i*, see Chapter 16.³⁵

Σαλαμίς. Stephanus knew that the Arabian word for “peace” was *salama*.³⁶ It is not clear, however, that the ancients connected the word with the eastern Mediterranean toponym Salamis. More recent scholars have derived it from the Semitic root $\sqrt{\text{slm}}$ “health, safety, peace.”³⁷ The island of Salamis in the Saronic Gulf opposite Athens has a western harbor that is sheltered from all points of the compass. Scholars have long seen that Σάρων, which gained its name from the coastal plain north of Troizen, derived from the toponym from the Palestinian coastal plain Šārôn.³⁸

The Salamis on Cyprus was on a bay on the sheltered east coast, where there were abundant Phoenician settlements in the First Millennium BCE. The shape of the Greek toponym Salam instead of the later Canaanite Šālôm, however, indicates that the name was borrowed in the Bronze Age. It remains an exact parallel to today’s Tanzanian capital Dar es Salaam.

Σάμος, Σάμη and Σαμοθράκη. The geographer Strabo wrote that toponyms with the element Sam- came from an old word for “high.”³⁹ This is generally confirmed by the geography of eastern Samos, which has peaks higher than those on surrounding capes and islands. It is also true of the western one, later Samē and later still Kephalaria; it is also true of Samothrace. Geography makes it difficult to include Σαμικόν in this cluster as it appears to have been applied to a marshy plain. Samothrace has strong Phoenician connections through the cult of the Kabeiroi.⁴⁰ As scholars have known for centuries, Samos certainly corresponds to the Semitic root $\sqrt{\text{smh}}$ “high” found in the Arabic *samā* “high” and the Phoenician *šmm* “heaven, high places” and the Hebrew *šamayim* “heavens.”⁴¹

Σέριφος. In mythology, Seriphos is the island where Perseus and his mother Danae were cast up in an iron chest. Approached from the sea, Seriphos appears dry, treeless and forbidding. Hidden valleys, however, are green and famous for their “serifian” frogs.⁴² Astour is attracted by the strong phonetic parallel between Seriphos and the Hebrew *šārāp* “burn” particularly and *šārāp* “fiery serpent.”⁴³ This is just possible given the burnt-up appearance of the island.

Σίφνος. Siphnos has been mentioned above in the section on Astypalaia and Kos because of its doublet Ἔγκλις and Μεροπίη. The name Siphnos itself has a plausible Semitic etymology. Bochart derived it from $\sqrt{\text{špn}}$ in the sense of “treasure,” as the island was famous for its gold and silver mines.⁴⁴

CONCLUSION ON ISLANDS. The high proportion of Semitic island names found in this selection—twelve as opposed to four with plausible Egyptian names—seems to confirm the possibility of Semitic influences. Earlier scholars from Bochart to Levin have carried out much of the work in this area. Indeed, almost the only original ideas in this section are the proposed Egyptian etymologies for Crete and Lesbos. Whether or not earlier Indo-Hittite or Egyptian forms underlie Aegean toponymy, they were largely obscured by Semitic names. Thucydides statement that in olden times Carians and Phoenicians had lived on the islands is, thus, backed up.⁴⁵

Some mountain names

Mountain names can be the most conservative toponyms. Far away from coastal and riverine influences, mountains are relatively unaffected by population movements and settlements. Against this isolation is the tendency for those on the plains to name mountains and for newcomers to conquer them and particularly to crown the highest peaks with new names. See, for instance, Mount Everest and Mounts Washington, McKinley etc. Be that as it may, in Greece few if any mountains have Indo-Hittite or Indo-European names. Most appear to have come from Egyptian or Semitic and to have become assimilated into Greek as names.

Before proposing some Afroasiatic etymologies for Greek mountain names, I should like to consider the most common word for “mountain, hill country” >ὄρος. In the genitive this has the variants *oureas* and *ōroes*. It is attested in the Linear B *orea₂*. Frisk sees it as a verbal noun of the verb ὀρνυμαι, ὀρέσθαι “to rush, raise oneself.” He and Chantraine also raise the possibility that it could be linked to the Sanskrit ṛṣ vá “high.” A Semitic etymology from forms vocalized in Hebrew as **har**, plural **hârîm**, “mountain, hill country” could possibly be modified by the Canaanite *horeš* “mountain” from the Afroasiatic root *ḥoras, which is found in the Akkadian *huršu*, the Egyptian *ḥꜣst*.⁴⁶

Ἄσσωρον. Chapters 5 and 7 covered the shift in the city name Tyre from $\text{Ṭ}^{(y)}\text{ôr} > \text{Șôr}$.⁴⁷ The original meaning was “rock.” This provides a suitable etymology for Assōron, a mountain on Samos. The prothetic vowel coming from the Canaanite article *Haṣṣôr. The Sicilian city name would seem to derive from Tyre itself.⁴⁸

Ἀτάβυρ(ι)ον. The etymology of Atabyrion from the Canaanite *Haṭṭābôr was given in Chapter 5.⁴⁹ Stephanus mentions Atabyria in Sicily, Persia and Phoenicia.⁵⁰

Ἴδα. The derivation of Ida from the Semitic $\sqrt{\text{yd}}$ “hand, monument” was given in Chapter 15.⁵¹

Δίκη. There are two explanations for Artemis’ epithet Δίκτυνα, one popular and the other scholarly. The popular one is from δίκτυον “net,” which is used for hunting and fishing and is altogether suitable for the hunter goddess. *Diktyon* itself is supposed to come from the supposedly ancient verb **δικεῖν** (6) only found in the aorist, with the meaning “to hurl, throw” and no established etymology. This would seem to derive from an Egyptian biliteral *tk found in the Demotic *tkʒ* and the Coptic *tōk* qualitative *tēk*, “hurl, throw.”

The scholarly explanation for Diktynna is that it derives from Mount Diktē the name of which is pre-Hellenic and, therefore, inexplicable. While I believe that the popular explanation is the more plausible, it may be possible to reconcile the two. There is an obscure term **δεκτή**, which Hesychios glosses as **χλαῖνα**, **χλανίς** “overgarments.” In Semitic the root $\sqrt{\text{dqt}}$ is found in the extinct Ethiopic language of Gafat as *dəqʷätä* and the Gurage language of Soddo as *däqot* “belt.” This has been plausibly linked to the Amharic *dəg* “long body band wrapped tightly around the middle of the body” and the Arabic *dikka* or *tikka* “waistband.”⁵²

The probability is that the forms with a final /-t/ represent the original form, in which case $\sqrt{\text{dqt}}$ provides a plausible origin for *dektē* and, in the sense of a net with a drawstring, *diktyon* and Diktynna. The connection with Diktē is more difficult, the only solutions are that it came from “net” or that the Dictaeon mountain range was seen as surrounding—at least from the south—the Laphistion Plain.

Καδίστον. At the beginning of the twentieth century, the scholar Ernst Assmann, argued that Mount Kadiston in northern Crete came

from a Semitic form found in the Akkadian *qadištu* “temple slave,” but also as an epithet of Ištar.⁵³ I do not believe one should be so precise but it certainly comes from the root $\sqrt{qds}$ discussed in Chapter 14.⁵⁴

Κιθαῖρων. Victor Bérard convincingly derived Mount Kythairōn from the Semitic root $\sqrt{qtr}$ Hebrew Piel verb form $q\ddot{u}t\ddot{t}er$ “to offer burnt sacrifices.” This corresponds well with Pausanias’ description of elaborate holocausts set up on its peak.⁵⁵

Λαύριον. For a derivation of **λαύρα** from *r-w3t* “the way,” see Chapter 9.⁵⁶ If the modern Lavrion really was already an alternative name for what was generally known as **Θορικὸς** the narrow strait to the island of Ἐλενί, it was the infamous twentieth-century penal island of Makronisos. If, as seems more likely, it was on the west of the peninsula it would be facing the much broader mouth of the Saronic Gulf.

Λυκαβεττός. The derivation of Lykabettos from $\beta\eta\beta\ddot{u}t$ “luminous region to the east,” written with a mountain determinative, will be discussed with other Athenian place-names in Chapter 22.⁵⁷

Οἶτη. Mount Oitē is part of the range that was thought to force the Persians to go through the narrow pass at Thermopylae. The Greeks were unaware of the track through the mountains that allowed the Persians to take them from the rear.⁵⁸ Two hundred years later in 279 BCE Celtic invaders came the same way. As Pausanias described the topography: “There are two paths over Mount Oitē, one above Trachis mostly precipitous and terribly steep and the other through Ainianian country, easier for the passage of an army, the one by which Hydernes the Persian attacked the Greeks under Leonidas in the rear.”⁵⁹ This time the path was blocked long enough for the Greeks to be able to evacuate their force at Thermopylae by sea.

The Egyptian *wʾrt* generally means “part, province.” With a river or canal determinative, however, it could mean “branch, leg” of a river. *Wʾrt* as a place name with a mountain determinative has been interpreted by a number of scholars: “passage in, gorge in a mountainous region.”⁶⁰ Even allowing for archaism, the retention of the final -t suggests that the name was taken into Greek before it disappeared from Egyptian. The Coptic form *ouerēte* from the dual *wʾrty* indicates that the medial -r- probably disappeared within Greek.⁶¹ Despite the phonetic

uncertainty, the semantic agreement is so precise as to make this a strong etymology.

***Ὀλυμπος.** Olympus was the name of a number of mountain ranges, notably the one north of Thessaly. Its derivation from *vermwēt* was discussed in Chapter 15.

Παρνασσός, Πάρνης. The mountain name Parnassos has given much pleasure to scholars thirsting in an otherwise empty toponymic desert for demonstrations of Anatolian influences on Greece. The late Professor Leonard Palmer liked it so much that he used it to describe a “Parnassos folk” who invaded Greece from Anatolia. His etymology is from the Hittite *parna* “house,” which in some cases could refer to a rock dwelling. This still seems odd as the name of a mountain.

Palmer argues that *parna* may be related to the Egyptian *pr* and the Hurrian *purli/ purni* “house” and that, therefore, it is likely to be a word indigenous to Asia Minor.⁶² For discussion, see Chapter 9.⁶³

Parnassos was famous in mythology as the place where Deukalion, the Greek Noah, landed to begin the repopulation of the world. Egyptian cosmogonies began with the emergence of primeval mounds from the chaotic flood waters. Different cults honored different sites as the original mounds.⁶⁴ The national shrine of Lower Egypt was called Pr Nsr; it was near the ancient cities of Pe and Dep and the later city of Buto. Egyptian Pr W3dyt is discussed in Chapter 9.⁶⁵ Pr Nsr is generally accepted as having been the capital of Lower Egypt before Unification in the Fourth Millennium and it remained a place of pilgrimage and coronation with the Red Crown throughout the millennia of dynastic Egypt. No religious inscriptions or texts have been found there so it is not usually listed among the primeval mounds but it is an excellent candidate. Its central political and religious importance in predynastic times and its geographical position, which Gardiner described as “situated almost like an island amid the watery fens of the north-western Delta,” make it an excellent contender.⁶⁶

As an etymon for Parnassos, Pr Nsr presents no difficulty with its first syllable. Coptic compounds containing -pōr and the Hebrew Par’oah indicate that *pār was a frequent rendition of *pr* before the Canaanite shift.⁶⁷ Nothing is known about the vocalizing of Nsr. Even so *parnVsr provides a better phonetic fit with Parnassos than does the Hittite *parna*. Given the myths about Deukalion, it makes a better semantic one too. It

would also explain the name Mount Parnēs, which dominates Attica just as Parnassos does Delphi and Boiotia.

Πτόον. James Frazer described Mount Ptōon as “a range or mass of mountains which bounds the Copaic plain on the east and extends thence north and east to the Euripus.”⁶⁸ The name comes from the Egyptian p³dw, Coptic ptōu(B), ptou(S) “the mountain.”

Σαίτις. Pausanias presumably reflected conventional wisdom in claiming that Sais, Saitis stood for Athena.⁶⁹ Therefore, there is little doubt that Mount Saitis was named after the goddess and her cult center.

Σαπυσέλατον. Pausanias reported that the old name of Mount Arachnion in the eastern Argolid was originally Sapyselaton.⁷⁰ Michael Astour points out that while it makes no sense in Greek Sapyselaton fits well with “Sps ilt pronounced approximately Saps >elat or Sapas >elat, ‘Sapsu the goddess.’ It is known that the Ugaritians considered the sun not a god but a goddess, and called her not by the common Semitic word for sun, Sams, but by a specific modification Saps”⁷¹ The problems with this reasoning are the absence of such a toponym in the Levant and the lack of any trace of a sun cult on the mountain. Nevertheless, the existence of many other Semitic toponyms in the Peloponnese, together with the precision of the phonetic parallels in such a complex name, would seem to overwhelm the objections.

Σφίγξ Φίγα. Mount Sphinx, or its simplification Phiga, lies northwest of Thebes and southeast of the Copaic plain. The mountain was associated with Oedipus’ Sphinx. The origin of Sphinx from the Egyptian šspw ʿnh has been discussed in earlier chapters.⁷²

Ταῦγετον. The derivation of the Peloponnesian mountain range Taygetos from the Egyptian T3(w) igr̥t “land(s) of the realm of the dead” will be discussed in the next chapter.⁷³

CONCLUSION ON MOUNTAIN NAMES. The names mentioned above make up a relatively small proportion of all the mountains in Greece. I am certain that many more can be derived from Afroasiatic. In any event, even this number is far greater than that discovered by scholars who have restricted themselves to Indo-European.

Rivers

If anything, river names are even more archaic than those of mountains. While the Gulf and Atlantic coasts of North America has the St. Lawrence, Hudson, Delaware and Rio Grande, these are countered by the Connecticut and the Susquehanna and the interior is drained by rivers with almost exclusively Native American names. Similarly, four out of the five Great Lakes have Native American names. Greece has very few substantial rivers or lakes but most of these, and many of the smaller ones, have Egyptian or Semitic names.

WORDS FOR RIVERS. Large rivers were called *potamoi*. The derivation of **ποταμός** from Pr tm was proposed in Chapter 9.⁷⁴

Another term used frequently for water courses in Greece was **χαράδρα** or **χάραδρος**. Its appearance in Linear B confirms that it was in use since the Bronze Age. Adolf Fick apparently felt no need to explain it, as **χάραδρος** is the word for “winter stream, torrent.” There is a plausible Canaanite etymology for both the toponym and the word. Chantraine plausibly associates *kharadros* with **χέραδος** “silt brought down by streams.”⁷⁵ A stream named **Φρίξος** “trembling, terror” was close to the river Kheradros in the Argolid.⁷⁶ Following Victor Bérard’s principle of Semitic-Greek “doublets,” this suggests that Kharadros comes from the Canaanite *ẖarad* ($\sqrt{hrd}$) “agitated, fear and trembling.”⁷⁷ This is used in the biblical toponym **Ḥarod**, the name of a torrent made famous by the settlement **ḥayin Ḥarod**. The semantic link between “terror” and a rushing stream would also seem to be present in the Latin *terreo* “fear” *extorris* and *torrens* “torrent” a river that rushes but dries up.

Chantraine follows his predecessors in associating *kharadros* with **χαράσσω** (H) “sharpen, scratch.” This form is a perfect match with the Canaanite $\sqrt{hrš}$ found in the Hebrew *ẖarāš* “cut, sharpen” and in *ẖarūš* “trench or moat,” which is ultimately related to *ẖarad*.

Another word for winter torrent is **άναυρος** (H) for which the lexicographers find no satisfactory etymology. The common Semitic root $\sqrt{nh}$ found in the Hebrew *nāhār* “stream, river,” with the Canaanite definite article *ha*, seems adequate.

RIVER NAMES. **’Ανίγρος**. Anigros, the name of a small sulfurous stream in the western Peloponnese, is mentioned in the section under Iardanos below. It has a clear Semitic etymology from the root $\sqrt{ngr}$ “spring, stream,

oasis” found in a large number of place-names in southwest Asia and northern Africa: Nagara, Nigira, Nigrai.⁷⁸

Ἀχερόων. Frisk and Chantraine cannot accept an Indo-European etymology for Akherrōn, a common name for rivers, the best known of which was in northwest Greece. It was also an alternative to Styx as the name for the river of death. These lexicographers, however, do not mention the etymology proposed by Lewy: that it derived from the Semitic *ʾaḫārōn* “behind, western sea.” This etymology would associate, as many cultures do, death with sunset. See the discussion of *erebos* “sunset, world of the dead” in Chapter 8.⁷⁹ Astour, however, took up Lewy’s proposal and West derived it independently.⁸⁰

Ἀσῶπος. Asōpos is a common river name; one example is the largest river in southern Boiotia. Another Asōpos meets the Sperchios above Thermopyae and a third reaches the sea near Sikyon in Akhaia. A fourth flows into the sea on the west side of the Parnon Peninsula south of Sparta. Astour derives the name from West Semitic as found in the Hebrew *ʾāsōp* “granary” and *ʾasap* “to gather, harvest.”⁸¹ The four rivers do flow through plains. Thus, this connection does seem semantically possible. The lack of evidence of its use as a toponym in the Levant, however, somewhat weakens this etymology.

Ἰάρδανος, Ἰάρδηνος. Fick saw Iardanos as “Lelegian” or Lydian but cited no parallels. As mentioned above, he specifically warned against identifying it with the Canaanite Iardēn or Iardān (Ieredan). Jasanoff and Nussbaum continue the tradition of denial by citing the Greek shift *y>h*, which is generally dated to circa 1300 BCE. To them an earlier loan into Greek would have been rendered *Hardanos.⁸² Even if their dubiously established date for the shift were accurate, a later introduction presents little problem. We know that Elis in the northwestern Peloponnese, the site of one Iardanos, was very much influenced from the east towards the end of the Bronze Age. In addition, eastern Crete where the other Iardanos was situated was strongly influenced by Phoenicians in the early Iron Age.

The early twentieth-century classicist J. G. Frazer, author of *The Golden Bough*, was convinced of the Semitic etymology of Iardanos. He reinforced this derivation by pointing out that Iardanos was also the old name

for two short rivers that fed into the lagoon of Kaiapha on the coast of Elis. These rivers were later known as the Akidas and the Anigros; the Anigros stunk of volcanic gases. Frazer showed that the leprosy cure described by Pausanias in the nearby cave of the Anigrian nymphs resembled the biblical cure of the leper Haaman the Syrian in the Jordan.⁸³

Ἰνάχος. The etymology of Inakhos, the river that drained the Argive plain, from the Egyptian *ʿnh* was discussed in Chapter 10.⁸⁴

Ἰτανὸς. Itanos was a city with plentiful Phoenician associations in eastern Crete, a region dense with Semitic place-names.⁸⁵ The name is old as it appears as Itano in Linear A and Utano in Linear B. Victor Bérard saw the parallel with the Hebrew *ʾēṭān* or *ʾētan* “perennial, ever-flowing.” Itanos had such a brook.⁸⁶

Κηφισ(σ)ός, Κῶπιᾶς, Καφύαι, Καιάφα. Kēphissos, or Kēphisos, is one of the commonest river names in Greece. Most were considered particularly pure and holy and often went underground and emerged again. Fick sees the name as “pelasgische” but offers no explanation.⁸⁷ An etymology from the Egyptian roots *√qbb* “cool” and *√qbh* “purify,” found in hydronyms, was proposed in Volume 2. Another attested Egyptian toponym *Qbhw*, written with the determinatives  (G42) and  (G39), was used as a place-name for ponds or lakes with aquatic birds. Three examples of the latter can be found in Greek hydronymy: Kaphyai a is a lake in Arkadia fed by mysterious springs.⁸⁸ Kaiapha is now a lagoon on the exposed west coast of the Peloponnese but in antiquity it appears to have been a marsh fed by a river Anigros.⁸⁹ By far the best known, however, was the lake or marsh named Kōpāis, a large shallow lake in Boiotia. It was drained in the Bronze Age and again in the nineteenth century CE. A river Kēphisos flowed into it. The alternation *ē/ō* in Kēphissos/Kōpāis is similar to that of *sēma* and *sōma* discussed in Chapter 5.⁹⁰

Jasanoff and Nussbaum contest the latter etymology on the grounds that Kōpāis is the name of the town on the lakeshore and the body of water gets its name from the town.⁹¹ They agree that Kōpāis *limnē* is “conventionally glossed” “Copaeon Lake,” but, according to them, it really means “lake near Copae.” They have no idea of the meaning of Copae. This argument seems to me to be absurd niggling. The names of lakes and the towns set on their shores are frequently confused, for

example, Eric, Windermere and Geneva. Given the parallel lake names Kaphyai and Kaiapha, there is no reason to reject an obvious origin from the Egyptian Qbh.

Λάδων, Θέλπουσα, Τέλφουσα, Τριτών. The parallel tangles of these toponyms in Boiotia and Arkadia were set out in Volume 2.⁹² Jasanoff and Nussbaum often dismiss my proposals by simply stating that a proposed etymology “might as well mean” without providing any serious alternative. For instance, they claim that the names Telpousa and Thelpousa for cataracts or springs in Boiotia and Arkadia might as well mean “‘Cataract,’ ‘Travelers Rest’ or any of a thousand other possibilities.”⁹³ My phonetically plausible etymology from the attested Egyptian place-name T3lbyw “Libya,” has several bases. It is based not merely, as they say, on the fact that Libya contains cliffs, cataracts and oases, but also on strong mythological and toponymic parallels of the Greek place-names with Libya. There are the role of the tumultuous god Poseidon and the hydronym Tritōn that is associated with him; these are found both as the name of a lake in Libya and as a stream flowing from Telpousa. Near the Libyan Tritōn was a river Lathōn or Lēton. The Arkadian Thelpousa was sited on a river Ladōn. Ladōn was also an alternative name for the river Ismenos that flowed past Thebes in Boiotia. In Volume 2, I give many other mythological and toponymic parallels between Libya and these areas of Boiotia and Arkadia.⁹⁴

Μαίανδρος. This Greek name of a Carian river occurs in Homer.⁹⁵ Famous for its winding course, the river gives us both the Latin and English words “meander.” Phonetically the stem would seem to be related to **μαῖα** “old woman, midwife” and to *mai-* which is the base of many words concerning the physical aspect of birth. Given the ancient association of the womb with the emotions, the latter may also form part of the root of **μαίνομαι** (H) **μανία** (H) and reduplicated **μαιμᾶω** (H). This root covers the semantic areas of “rage” and “madness.” Pokorny, Frisk and Chantraine want to set these within the Indo-European cluster *men “think,” although Chantraine does see some semantic distance.⁹⁶

A Semitic origin is much more plausible in biblical Hebrew where *mē ʾyīm*, construct *mōʾy*, generally means “bowels, intestines.” In some instances, however, the form refers to the “womb, source of procreation.” It is also used figuratively as the seat of emotions; usually compassion in Hebrew but in Ge'ez and other Ethiopic languages *māʾat* means “to rage,

be angry.”⁹⁷ These forms with and without the plural suffix -ayim, would seem to provide plausible etymologies for the whole of the Greek cluster. In the latter language, however, the predominant sense is female. Thus, it would be necessary to specify when a speaker wanted to refer to the only *me'a*/maia possessed by men. This need might explain the suffix -andros “of a man” attached to the stem. In any event, the toponyms Maiandros/Meander find a plausible etymology in “intestine river.” Analogies for this exist in, first, the Egyptian word *q3b* “intestine” written with determinative = (F.47). The word in the plural, *q3bw*, with the same determinative was used for the “windings of a waterway.” The second analogy is with the Chinese *gāng* “large intestine” and *gǎng* “creek or natural harbor,” as in Xianggǎng “fragrant harbor,” otherwise known as Hong Kong.

Παμίσσος. John Chadwick persuasively linked the Mycenaean river name Qamisiyo to the Pamisos River in Messenia. In fact, this name was given to several small rivers. Fick merely stated without explanation that Pamisos is from Asia Minor.⁹⁸ In Egypt the lesser distributaries of the Nile are called Pa-mw “the water of. . .”⁹⁹ These would seem to be explicable as Pa-mw with the suffix -is(s)os. For a long discussion in which I argue that in the fourteenth century the sign written *qa* was pronounced *pa*, see Chapter 9.¹⁰⁰

Πηνειός, Φερεός. The derivation of these lake names was mentioned in Chapter 9 and discussed in Volume 2.¹⁰¹

Στύξ. Styx is not an earthly river but an infernal one. It is clearly connected to *στυγέω* “to hate, abhor” and *στυγνός* “hateful, gloomy.” Pokorny, Frisk and Chantraine want to relate it to Slav roots found in the Russian *stygnuti* “cold.” Though fine phonetically, this connection is not good semantically. Although Odysseus’ Hades is cloud-covered and misty, there is no suggestion that anyone there feels cold.¹⁰² The Egyptian *stkn* “to cause to approach, induct, bring on doom” seems more appropriate.

CONCLUSION ON RIVERS NAMES. Greece has relatively few river names, and a high proportion of those that exist have Egyptian or Semitic names. This picture is very different from the patterns in England, where most of the river names are Celtic or pre-Celtic, and in English-speaking North America, where a high proportion are of Native American origin.

Although too much should not be made of this particular aspect, it does indicate the very high degree of Egyptian and West Semitic linguistic and cultic influence upon Greece.

CITY NAMES

The names of human settlements are generally, but not always, more susceptible to change than those of natural phenomena. It is not surprising, therefore, that relatively few city names can be traced back to an Indo-European, let alone an Indo-Hittite, substrate, and most of the major names have reasonable or strong Afroasiatic etymologies. As an example, one characteristic found in the names of many major cities is that they appear to have the plural suffix *-ai* or *-oi*.¹⁰³ In fact, this feature derives from the Canaanite dual suffix *-áyim*, construct-*ê*, frequently used for cities. The late Cyrus Gordon showed that in Bronze Age Canaan the duality of cities was important and he plausibly associated this duality with the double nature of the acropolis and the lower town, a feature that was found around the eastern Mediterranean at that time. Hence such names as *Qiryâtayîm* “double city” and *Maḥṇayîm* “double camp,” discussed below, are frequently attested in the Bible.¹⁰⁴ A Greek calque for this sense of duality is evident in the frequent use of the prefix *ἄμφι-* “both, two” in city names.¹⁰⁵

Ἀθῆναι. This toponym was not restricted to the capital of Attika; as mentioned in Volume 2, other cities of the same name were sited in Boiotia and elsewhere.¹⁰⁶ Athens will be treated at length in the last chapter.

Ἄργος. This city name is not a loan from Afroasiatic but a calque from Egyptian. As I pointed out in Volume 1, *argos* means “brilliant white” while *inb ḥd* “silver walls” was a frequent name for Memphis.¹⁰⁷

Δελφοί. Delphi and its derivation from a Semitic **qʷəlf* were discussed in the last chapter.¹⁰⁸

Δρερος. The city of Drēros was situated in far eastern Crete on the slopes of Qadiston, mentioned above. Therefore, Astour’s suggestion that it had a Semitic etymology seems very plausible. He pointed out that in Hebrew *dərôr* means “free” and that in Mesopotamia there was a city

Durâru “freetown” near Larsa, with that meaning. One called Eleuthernai also existed in western Crete.¹⁰⁹

Ἑρμιῶν, Ἑρμιόνη. For the derivation of this city name from the Canaanite toponym Ḫermôn see the next chapter.¹¹⁰

Θέσπεια, Θίσβη. The derivation of these two Boiotian city names from the Hurrian thunder god Tešsub and their association with Tešsub’s Greek counterpart Herakles were discussed in Volume 1.¹¹¹

Θήβαι. Stephanus listed nine Thebes: in Thessaly, in Cilicia, in the Troad, near Miletos, in Attika, in Kataonia in central Anatolia, in Italy and in Syria.¹¹² It simply meant “palace, seat of a monarch, capital.” By far the best known, of course, were those in Egypt and Boiotia. In Volume 2, I set out the toponym’s etymology from a confusion of two Egyptian roots, *tbi* and *dbt* “box, chest” and *ḏbʒt* “coffin, shrine” and, hence, “palace” *ḏbʒ*, Coptic Tbō (S) or Thbō (B), was the secular name for the major city Bḥd(t), the later Edfu.¹¹³ There was undoubtedly a palace at the Hyksos capital of Avaris, and the possibility that it was referred to as *ḏbʒ* is increased by the modern name Tel ed Dab’a. If Greeks had referred to Avaris, the capital of Egypt during the Hyksos period, as *Teba, this would explain the puzzle of why, when the capital was moved south with the triumph of the Eighteenth Dynasty, they called it “Thebai,” even though the name was never used for that city by Egyptians themselves.

The situation has been confused by Greek myths playing on the Canaanite stories of *tēbāh* in the sense of “ark.” Astour has shown intricate parallels between legends about the foundation of Thebes with the wanderings of unyoked heifers and stories of the movement of the Israelite ark.¹¹⁴ Jasanoff and Nussbaum write that Bernal, “tacitly assumes the identity of the name Thebes, with the barely attested Greek noun *thîbis* ‘basket’ was ‘generally accepted’ before the advent of the Aryan Model.”¹¹⁵ In fact, all that I “assume” is that both the word *thîbis* and the toponym Thēbai come directly or indirectly from *ḏbʒt* and *dbt*.

Jasanoff and Nussbaum’s major objection to this etymology is that the city name was written Teqa in Linear B.¹¹⁶ I have made the argument in Chapter 5 that qa was read as pa in late Mycenaean times.¹¹⁷ I have admitted, however, that this case could cause problems because the city name may have been introduced rather earlier than *pasiyara/basileus*.¹¹⁸

Κάρνα, Καρυάτιδες, Κόρινθος. A widespread cluster of toponyms includes such variants as **Κάρια, Κάρνα, Καρύαι, Γαρύαι, Καριότες, Καρθαία, κόρυς Γόρτυν** and **Γορίτος**. As the terms Karo, Keretewo and Korito found in Linear B have been identified as place-names it is certain that at least some of them date from the Bronze Age. Chadwick plausibly sees Korito as the classical Korinthos, although not the famous city on the isthmus.¹¹⁹ This raises the possibility that Korinthos and Kērinthos in Euboeia both came from a nasal dissimilation before a dental. Parallels exist in the pairs of names Athēnē, Anthēnē, and Didymos, Dindymos.¹²⁰ Thus Corinth too may belong to the Karia group.

It has been argued that Karia and Karua cannot be from the same stem because in the Second Millennium, unlike classical times, the Greek /u/ was a back vowel and could not be confused with an /i/.¹²¹ As Ventris and Chadwick noted, however: “Confusion of *ī* and *ū* is not only found in the *κοινή*, but also in pre-Greek words and names.”¹²²

No doubt the gradual shift from /u/ to /y/ in Canaanite during the Second Millennium indicates that the distinction was not clear in that language. The development *w>y* is well known in the initial position.¹²³ There was also considerable confusion between the two glides or semivowels in the medial position. As Paul Joüon wrote in his authoritative grammar of Hebrew: “The two vocalic consonants *y* and *j* being analogous, it is easy to move from the one to the other.”¹²⁴

Various traditions have explained these place-names. Some writers linked the Karias to the Carians, probably resulting in the general belief in classical antiquity that there had been a Carian “thalassocracy” or maritime empire. Carians in the fifth century BCE denied the truth of this.¹²⁵ Furthermore, despite Thucydides’ report of Carian burials on Delos, no archaeological trace of these people can be found in the western Aegean.¹²⁶ Considering its proximity, Caria was relatively unimportant in Greek mythology and none of the founding heroes were supposed to have come from there.

Another explanation was that many of the Karias may have been names after a king Kar. Most notable of these places was the acropolis of Megara, which was called Kar(i)a.¹²⁷

A slightly less implausible explanation is that the Karyai were named from the Greek *karya* “nut tree.” No doubt a few Greek place-names do come from trees. However, *karya* does not explain the other variants, nor, given the slight importance of nut trees in Mediterranean mythology, does it explain the toponym’s extraordinary frequency.

A much more plausible etymology is Semitic: *qry*, also written *qryt*, meant “city” in Canaanite. This would seem to derive from a Semitic root $q^{w/y}ar(y)$ which may be attested in the Amharic $q^{w}äräqq^{w}ärä$ “found a city” and the Gannan Gurage $q^{w}ärq^{w}är$ “pen, fence in meadow.” The original sense may have been “to bolt two pieces of wood together,” see the (Soddo) Gurage $qäräqärä$ “to lock the door with a bar.” Hebrew has the words $qôrâh$ “fitting beams,” $qârâh$ “to lay beams” and $qûr$ “wall.” In Arabic *garra* (*qarartu* or *qariutu*) is “to settle or establish residence.” With such a phonetically complex root it is not surprising that the Canaanite *qryt* should have a wide range of vocalizations. In the Masoretic text one finds *qiryat*, *qeret* and *qarttâh*. In the Septuagint the city names are usually transcribed Kariat(h) or Karith.¹²⁸ Greek and Roman renderings of such Phoenician names nearly all give /a/ as the first vowel. For instance in Punic southeastern Spain twelve ancient toponyms began with Cart- and four with Car-.

In the eastern Mediterranean place-names with this root (like many others) were often found in the dual, for the reason set out in the introduction to this section. A city near Sidon presumably named *Qrtm in Phoenician was rendered Qar-ti-im-me in Assyrian.¹²⁹ In the Bible there is a city in Moab called Qiryâtayîm, (Kariathaim in the Septuagint) and another in Naphtali, which was also known as Qarttân.¹³⁰ The city names Kortyn and Gortyn could well come from Qrtym. In some cases, the final -n, -ne or -na could come from an Egypto-Canaanite doublet: the Egyptian *nîwt* “city” was written *ne* in Coptic and *ni* in Assyrian texts.¹³¹ This doublet could explain the city names Kerneia, Gerenea and Koronê. Such an explanation would at least be more plausible than the common etymology from *geranos* “crane” or *korōnê*, “sheer water.”

Beyond the inherently greater likelihood that such common city names should mean “town” rather than “Carian,” “nut tree” or “sea bird,” several pieces of evidence link *Kari/ya(t)* to *polis*. The chief city on the island of Keos was known alternatively as Karthaia—a name that appeared in Punic Spain—or Poleis. Also, as mentioned above, at Megara the acropolis was called Karia, while at Athens the cultural height was simply referred to as Polis.¹³²

The stem *Kari/yat* may also have been used for binames for some Greek gods. In two Peloponnesian cities—not called Karyai—Apollo was known as Kereatas and Koruntheos.¹³³ Artemis was named Karyatis and Herodotos referred to an old Athenian family sacrificing to Zeus Karios.¹³⁴

These could stand for Carian or be related to the root *Keras*, *Keratias* “horned.” It would seem equally, or more, likely that they were parallel to the ancient epicleses Polia, Poliatis and Polieus and could best be explained as meaning “of the city.”

The most striking example of the parallel between Kari/ya and Polis comes from Athens. In the Erekhtheon, the southwestern porch of the city’s most sacred temple of Athena Polias, six figures of the Karyatides surrounded the tomb of the legendary Kekrops. The earliest attestation of the name Karyatides is in the works of Vitruvius from the first century BCE. Given the sanctity of the site and the proverbial religious conservatism of the Athenians, however, there is no reason to doubt that the statues’ names, like those of similar figures at Delphi, were much more ancient.¹³⁵ Were these “nut fairies” or priestesses of Artemis from Karyai in Lakonia? It would seem far more plausible to suppose that the figures around the tomb of the city’s founder should be called children (the derivation of the Greek suffix -ides “child of” from the Egyptian *id* “child” was described in Chapter 9) or spirits of the city.¹³⁶ As such, Karyatides would be entirely appropriate in the temple of Athenē Polias.

Λάρισσα. In Volume 1, I refer to “many” Laris(s)ai.¹³⁷ Stephanos names ten.¹³⁸ Homer applied the epithet *eribōlax* “deep-soiled, fertile” to two of them. Strabo, cited by K. O. Müller, maintained that all Larissai were on alluvial soil.¹³⁹ Jasanoff and Nussbaum challenged the two ancients and me and claimed that the second Thessalian Larisa (Kremastē) does not fit this pattern as it was situated “high on a mountainside.”¹⁴⁰ According to Pausanias, however, it was “by the sea.”¹⁴¹ It was almost certainly on slopes overlooking a small coastal plain. Larisa is a city name and, as such, it was associated with walls and heights, most strikingly as the name of the acropolis at Argos, which dominated the fertile Argive plain. For this reason, not because of any association with mountain ranges, Stephanos wrote that Larissa originally meant “citadel”; combined with Strabo’s judgment this would mean a mound over flat fertile land.

From inscriptional evidence Professor Bietak, the excavator of Tel Ed Dab’a, has identified the name R-ḫt “entry into the fertile lands” with the Hyksos capital Avaris.¹⁴² Jasanoff and Nussbaum do not challenge the phonetics of the etymology, but in any event these are good. Vocalizations of R- as la- were given in Chapter 9.¹⁴³ The disappearance

of initial and medial /h/ is extremely frequent in transcriptions and acknowledged loans and final -t in Egyptian is often rendered as -is in Greek (see irt/Iris, St/Isis).

The semantic match is excellent. R-3ḥt as the name of the Hyksos capital set in the Nile Delta corresponds neatly with Larisa, the acropolis of Argos, the city of Danaos with special cult associations with Aigyptos and overlooking one of the most fruitful plains of the Peloponnese.¹⁴⁴ The northern section of the largest plain on the peninsula, on the boundary between Elis and Akhaia, which brought the Nile Delta to Pausanias' mind was drained by a river Larisos.¹⁴⁵ According to Xenophon, the Larisa in Anatolian Ionia was also called Aigyptia.¹⁴⁶

Above the swampy seaside plain near Gythion in southern Laconia was a sacred Mount Larysion.¹⁴⁷ In eastern Crete, the city later known as Hieraptna was called Larisa and dominated the Larisian Plain.¹⁴⁸ According to Stephanus of Byzantium, Larisa was an old name for Gortyn, the acropolis of which is a hill in the middle of the Mesara, the largest plain on the island.¹⁴⁹ The inland Larisa in Thessaly was a stronghold in the heart of a great and marshy plain. The Larisai in western Anatolia appear to have had similar situations.¹⁵⁰

It is striking how many of the Larisai were set in regions that archaeological finds indicate were densely populated in Mycenaean times.¹⁵¹ Legendary evidence is still more clear-cut. The name "entry into the fertile lands" fits perfectly with the position of Larisa on the Peneus in central Thessaly.

Μαντινέα. In Demotic, *m3'* has a special signification of "place" in addition to its meanings of "right, truth" etc. From *m3' n* "place of" one finds in Coptic the toponymic prefix Man-.¹⁵² Therefore, it would seem permissible to postulate a *m3' n t3 niwt*, later Man tə ne/ṯ "place of the town." It should be noted that the original accent Mantinea corresponds to an emphasis on -ne "town." The later Mantinea reflects the normal pattern of recessive accents, when the original Egyptian sound had been lost.

According to a number of ancient writers, the district around Mantinea was inhabited by four or five townships.¹⁵³ The center of the confederacy, the later city of Mantinea on a hillock was called Πτόλις "city."¹⁵⁴ Thus Mantinea/Ptolis makes a good Egypto-Hellenic doublet. The late (on the Egyptian timescale) form of the Egyptian etymon, however, suggests that it was only introduced during the Early Iron Age during the same period that many Egyptian terms were adopted in Laconia.¹⁵⁵

Μέγαλα. The common Greek toponym Megara or Meara came, as Pausanias suggested, from the word *megara* in the sense of “cave, subterranean chamber.”¹⁵⁶ For the last three centuries many scholars have linked this word to the Hebrew *məʿārāh* “cave.”¹⁵⁷ The West Semitic word with this meaning occurs in the Ugaritic place-name Mǧrt.¹⁵⁸ The Greek toponymic variants Megara and Meara suggest that the first was borrowed before, and the second after, the West Semitic *ǧain* had merged with *ʿain* around the middle of the Second Millennium.¹⁵⁹ Another example of an early transcription of *ǧ* as *g* comes in the city name called ʿGazzeḥ in Arabic, Gḏt in Egyptian and Gaza in Greek but Cazzah in later Canaanite. Such early datings for the Greek names Megara and Gaza would parallel those of Byblos and Tyre, which can be shown on phonetic grounds to have been standardized before 1400 BCE.¹⁶⁰

Μέθανα, Μεθώνη, Μοθώνη. In a brilliant study, Alan Lloyd has showed that a description by Strabo of fights between bulls in a *dromos* by the temples of Apis and Hephaistos in Memphis was from an Egyptian tradition going back to the Old Kingdom or beyond. It appears to have symbolized the conflict between Horus and Seth.¹⁶¹ Translation of *dromos* into English is difficult. It can refer not only to an avenue or a race course but also to a circular space or the orchestra of a theater. The earliest attested, and most common, Egyptian term for the site of a tauromachy is *mṯwn*, which has as its determinatives either “bull” or “land.”¹⁶² *Mṯwn* is clearly derived from *ṯwn* “gore, pierce” with the locative prefix *m-*.

In Homer **μόθος**, accusative *mothon*, means “din of battle.” According to Liddell and Scott, however, it is “generally a fight between animals.” In 1955, Professor Stricker showed the striking parallels between early Greek theater and Egyptian rituals and dramatic tradition.¹⁶³ Evidence from the Greek side would seem to indicate that either in Egypt or in Greece the meaning of *mṯwn* was extended from animal fights to theater in general. Possibly this semantic shift was influenced by the Canaanite *māḏōn* “strife and contention” coming from the root *dyn* “judge.” The Greek forms closely resemble the Egyptian ones in both phonetics and semantics. The Greek *mothōn* could mean “a licentious dance, a flute tune, presumptuous impudent fellow.” Plutarch reported that the Spartans forced the Helots to drink and “ordered them to sing songs and dance dances that were low and ridiculous.”¹⁶⁴

Mṯwn was a common Egyptian place-name, which possibly survives in the toponym Me(i)dum.¹⁶⁵ The names Mothōne, Methōne or Methana

were almost equally frequent in Greece. Methana in the Argolid was set on the coast of a spectacular gulf that could well be seen as a theater. The same is true, on a much larger scale, for the Methana in Thessaly. Pausanias describes the Mothōne in Messenia as follows: “my view is that the place got its name from the rock Mothon, which is also what creates the harbour there: it runs beneath the surface leaving a narrow entrance for ships and makes a barrier against deep sea waves.”¹⁶⁶ Thus this location too could be seen as a theater. There is no doubt that the names of these cities are the same. While spelling may vary in each case, the facts that the Isis worshipped at Methana in the Argolid appeared on the coins of Mothōne and that the Artemis worshipped at Mothōne appeared on coins of Methana show that—at least in later times—the citizens believed they were connected. The most striking evidence from numismatics comes, however, from a coin from Mothōne. Frazer describes it: “The harbour of Mothōne is represented in the shape of a theater.”¹⁶⁷ This coin ties the name semantically to Μῑτwn.

Μυκῆναι. The traditional etymology for the great Late Bronze Age city Mycenae is from mykos “mushroom,” which in the extended sense of “knob” is still sometimes accepted. Fick merely wrote that Mycenae might be placed with Mykalē and Mykalēssos, which he saw as Carian.¹⁶⁸ They could indeed be related to the extent that they all might well begin with the Afroasiatic locative prefix m-. In the 1890s, Muss-Arnolt proposed a derivation from *məḳōnāh*, an attested feminine form of *makōn* “place, settlement” in many Semitic languages.¹⁶⁹ A more plausible candidate would seem to be *mḥn*, *maḥāneh* in Hebrew “camp.” In both the singular and dual forms *mḥnm*, *maḥānayīm* “double camp.” This form is a common place-name in Ugaritic and Hebrew. Jasanoff and Nussbaum do not refer to the etymology from mykos and provide no alternative. They simply attack the proposal that it derives from **maḥānayīm*.

But more to the point is Bernal’s failure—or refusal—to notice that the ending -ēnai/-ēnē older (<older -ānai/-ānā) is a recurring element in Greek place names. No credence can be attached to an analysis of “Mycenae” which separates the termination -ēnai/-ēnē from the corresponding -ānai/-ānā of names like Messānā “Messene” and Kurānā “Cyrene.”¹⁷⁰

While I am aware of the endings -ēnai etc., I do not think that these prefixes can be separated from a wider class of Greek city names: those

ending -ai or -oi, as discussed in the introduction to this section. City names with -ēnai are simply those in which the stem has a final -n. The name **Maḥānagīm* also fits the city's military connotations and the fact that it was situated above and beyond the Argive Plain with its older cities Argos, Tiryns and Lerna makes for an excellent semantic match. The etymology is certainly competitively plausible, especially when the only competition comes from a mushroom!

Πύλος. The argument that the city name Pylos derives from the Egyptian *pr* or *pr* ʿ3 was made in Chapter 9.¹⁷¹

Σικυών. Rather than coming from σικυών “field of cucumbers” Sikyōn would seem to be from the Canaanite **sikun*(*āh*) attested in later Hebrew as “settlement, quarter.” Chantraine notes that the uncertainty between ι and ε in σικυών and the variation σεκυών indicates a borrowing.

Σπάρτα. The derivation of the name Sparta from the Egyptian *spʒt* “district” will be set out in the next chapter.

Τροιζήν. In Chapter 22, there is a discussion of the origin of the name Troizēn in T3 s3n(t), the later Esna in Upper Egypt.¹⁷²

Ψοφίς, Ψαφίς. The city name Psōphis occurs in Arkadia and on the island of Zakynthos. There is also a Psaphis in Attika. These seem to have come from the common Egyptian toponym P3 sbt(y) “the wall, the fort.” The vocalization was uncertain in both countries. The word was attested in Coptic as *sobt* and the name with an article as Psabet.¹⁷³

CONCLUSION

As is true with all the sections of this chapter, this one on city names provides only a sample of the huge number of Greek toponyms with more or less plausible Afroasiatic origins that could be teased out by more assiduous an expert student of the eastern Mediterranean than I. Nevertheless, I hope that this selection sufficiently indicates the riches to be found in that pursuit.

CHAPTER 21

SPARTA

The Dorians took possession of the rich vale of the Eurotas, and, keeping their own Dorian stock pure from the mixture of alien blood, reduced all the inhabitants to the condition of subjects . . . The eminent quality which distinguished the Dorians . . . was that that we call “character” and it was in Lakonia that this quality was most fully displayed . . . for here the Dorian seems to have remained most purely Dorian.

J. B. Bury, *A History of Greece* (1900)

INTRODUCTION

In this chapter, I shall range widely on the strong Afroasiatic connections of what has generally been seen as the most “Aryan” of the Greek states. The first section deals with the derivation of the name Sparta from the Egyptian *spꜣt* “nome, district” and the district’s capital. The second is concerned with the Egyptian jackal god Anubis “Lord of Spꜣ,” guide for the dead, and his Greek counterpart Hermes.

The chapter continues with a consideration of the meanings of the names Lakōn and Lakedaimōn as “howler, biter” and “howling biting spirit” and with the importance of canines in Spartan tradition. Lakedaimōn is explained as a calque of *K3 >Inpw “Ka or spirit of Anubis” rendered Kanōpos in Greek. A short study of the derivation of the name Hermes from the complicated semantics of the Semitic root √ḥrm follows.

In a section devoted to the cult at Amyklai I argue that, rather than the festival of Hyakinthia gaining its name from a mythical hero Hyakinthos, the hero gained his name from the festival. Furthermore, I argue that Hyakinthia was a rendition of the Egyptian festival of death and rebirth W3g in a form I postulate as *W3g ntr “sacred W3g.” I then discuss linguistic evidence that the failure to pronounce the /3/ as /r/ or /l/ in this case suggests a wider pattern indicating that much of the

special Lakōnian vocabulary with plausible Egyptian etymologies was borrowed late—some perhaps even as late as reforms of Lykourgos around 800 BCE. The last sections consider the likelihood that Sparta had a special cult of death and, finally, the contacts between the Spartan King Areios I and the Jewish High Priest Onias.

SPARTA: *SPER AND SP3T

August Fick provided no Indo-European etymology for the toponym Sparta. He merely called it “doubtfully Lelegian.”¹ The name could be derived from the root *sper “to sow,” an extremely productive root in Greek. Sparta could then mean “sown land.” Such an etymology would fit the legend of Kadmos’ having *sown* dragon’s teeth at Thebes to grow Σπαρτοί “warriors.” Indo-Europeanists have deemed this explanation improbable and not accepted it. In an extended sense, however, I believe that this version might be correct. Two related roots, *per, *por “to separate, divide” and *pir, *per “to bring forth, bear fruit” are both found throughout Nostratic.² In Afroasiatic many verbs have been prefixed by a causative s-. Thus, in Canaanite, for instance, one finds the biblical name Siprâh given to a midwife, someone who causes birth.³ There is also the word *sapar* “beautiful,” used of brides and fruitful plains. The Greek words σπείρω “sow,” σπέρμα “seed” and σπόρα “sowing” etc. could possibly be derived from this Canaanite root. It would seem more likely that, as Hermann Möller suggested in 1911, and Carleton Hodge revived more recently, the so-called “s-mobile” is in Indo-European—as in Afroasiatic—a causative usually, but not always, prefixed to the root. That is to say it is Nostratic.⁴ The s-mobile explains some English words, such as spill “make fall,” split “cause to part,” stir “turn” and swirl “whirl.”⁵

Both the root √pr and the causative s- existed in Egyptian. There are the words *prt* “fruit,” *pri* “go, come out, burst forth,” *spr* “arrive, reach,” *spri* “expel.” Similarly *p3* “fly” parallels *sp3w* “birds made to fly.” In a semantically derived sense—resembling the Latin *pars/partis* and *separ*—“separate”—one finds the Egyptian *sp3t* “district, nome” apparently coming from a meaning “section, division.”

Whether or not one derives *sp3t* from *s+pr, Sp3t is by far the most plausible etymon for Sparta. In many sophisticated societies, the line between a territorial division and its capital or center of administration is difficult to draw. In China a *xian* is both the county and the county

seat, a similar ambiguity surrounds the Arabic *medina*. In Ancient Egypt *Sp3t* was a common place-name and place-name element for nomes or districts and towns.⁶ It was also used by Egyptians abroad. For instance, in the Twelfth Dynasty, the district or city of Shechem was named *Sp3t*.⁷ The town name *Qiryat Sêpêr* also may have meant “district town” in Canaanite and Egyptian rather than “town of the scribes” as described in the Septuagint. Yoël Arbeitman has pointed out that *qiryat* had the same double meaning as *medinat*.⁸ The *spartoi* at Thebes, mentioned above, simply took their name from the Egyptian *sp3tyw* “nomesmen.” The picturesque legend of “sowing the dragon’s teeth” was an attempt to explain the name by linking it to the root **sper*.

Sp3t and Sardis

It is also probable that *sp3t* was used in Anatolia. The Persian name for the Lydian capital—called Sardis by the Greeks—was Sparda or Saparda. The second may be closer to the original Egyptian, which tended not to tolerate initial double consonants. In Aramaic the city was called Sprd. The Lydians themselves wrote Sfard or Suard, from which, presumably, the Greek Sardis derives.⁹ As both the Egyptian and Anatolian languages largely neutralized the voicing of their stops during or before the Second Millennium BCE, there is no problem in equating the final -t of *Sp3t* with the -d in Sparda and Sfard.

In *Cadmean Letters* I argued that the Lydian and Etruscan letter 8 transcribed as an /f/ was originally a /w/ or long /ō/. If this is so, it cannot have represented a /p/. I also maintain that Lydian spelling conventions were established in the Late Bronze Age.¹⁰ Thus, although originally **Spart*, the Lydian pronunciation would have been Sfard or Suard by that period.¹¹ This case would also be strengthened if, as some scholars have maintained, Sardis and Sardinia were connected in some way. Such a hypothesis is backed by evidence of eastern Mediterranean culture on Sardinia at the end of the Second Millennium.¹² If, furthermore—as most scholars accept—Sardinia and the Sea Peoples, called Šrdn in Egyptian and Sirdanu in Akkadian are also connected, a labial is unlikely in the name in the fourteenth century when the people were first mentioned.¹³ The view that the Šrdn came from Sardis and then colonized Sardinia is attractive, especially as no Lydians are mentioned among the Sea Peoples. On the other hand, a powerful case has been made for the

Trš, Trojans/Etruscans, coming from Lydia and Gardiner and Astour have made reasoned arguments for the Šrdn deriving from eastern Anatolia or the Caucasus.¹⁴

Even without this connection, Sardis was probably pronounced *Suard in the Late Bronze Age. On the other hand, although the name has not so far been found on Hittite documents, the Persian Sparda was likely inherited from earlier cuneiform spellings. Furthermore, although the Aramaic writing could be read as Sfrd, the word seems to come from an earlier form, Sprd.¹⁵ In this case, a loan from Spʔt would be possible but it would have to have been made before the second half of the Second Millennium BCE when /ʒ/ generally lost its liquid quality. I have made arguments in favor of Egyptian influence in northwest Anatolia at this time in chapters 9 and 10.¹⁶

Another indication that the name Sardis was derived from Spʔt comes from the Etruscan word for “city” *spur*. We know that the Etruscans copied from Greek and there is every reason to suppose that they also took from Egyptian. The borrowing could have happened during the Bronze Age in Anatolia, during the invasions of the Sea Peoples, in Italy during the Iron Age or during any two of these periods or all three. Two other institutional terms from the very scantily known Etruscan vocabulary appear to have Egyptian etymologies. The first is *zil* “magistrate,” apparently from *sr* “magistrate” for which we can plausibly reconstruct a Second Millennium vocalization **sy(a)l*.¹⁷ Next, according to the Italian Etruscologist Massimo Pallotino, the Etruscan word *mech* is a “political or institutional concept probably *populus*.”¹⁸ *Mech* would seem to be derived from the Egyptian *mš* “troop of soldiers, gang of workmen” which later became the Demotic *mšj* and Coptic *mēšē* “people, multitude, army.” The loan to *mech* would have been very early because the Egyptian sign $\equiv$ (N37) conventionally transcribed š was originally pronounced /ḥ/ but seems to have shifted to š during the Third Millennium.¹⁹ The final dental is absent in *spur*, as it is in the Egyptian variant *spʒ* and the Lydian case ending -sfar(l). The vocalization presents a greater problem. The Etruscan *u* stands for *o* and we know that after about 1400 BCE the Egyptian *a* often shifted to *o*. By this time, however, /ʒ/ had nearly always lost its consonantal force.

Despite the general meaning of Spʔt and its possible ramifications throughout the Mediterranean, it is possible to be more specific about the Sparta in Lakonia.

ANUBIS, HERMES AND SPARTA

Like all Egyptian gods, Anubis had many binames, among which one of the more common, attested since the Old Kingdom, was “lord of Sp3” or Sepa.²⁰ The early twentieth-century Egyptologist, Hermann Kees plausibly claimed that Sepa was linked to a specific place-name Sp3 or Sipt near T3r 3w just north of Memphis. This and the use of the determinative for irrigated land,  (N24), for *sp3t* “nome” strongly suggest that Sp3/Sepa was related to Sp3t, which raises the problem of whether the Sepa had a final -t.²¹ To my knowledge the final -t is indicated in only two cases. The first is the form Sp3ti(?) found in an inscription from the Herakleopolitan period just before the beginning of the Middle Kingdom.²² The second is the Sipt written in the *Onomastikon of Amenope* from the Twentieth Dynasty.²³ Despite the absence of a -t in the many other attestations, the phonetic could have been contained in the determinative on the principle of economy. Both Sepa and Sp3t were frequently written without an /3/ and sometimes even without /s/ and /p/. Given the plausibility of the etymology from Sp3t, a postulated title Anubis, Lord of Sp3t, would seem possible, if there is supporting evidence.

In the Egyptian tradition of religious punning, Anubis was also associated with *sp3*  (L5) “milli-centipede” [a creature in sections] and possibly with *sp3* “let fly,” used in the *Pyramid Texts* to signify “the sending of the pharaoh’s soul to heaven.”²⁴ In the *Coffin Texts* one finds the statement, “I am the centipede” on the day of the centipede.²⁵ With this general background Sp3(t) was sometimes considered an independent god “lord of the insects.” Usually, however, he was associated with Anubis in the embalming ritual.²⁶ On the other hand, the *sp3t* determinative with a checkerboard of fields and canals associated Sp3(t) with districts and irrigation and, hence, with Osiris. Thus, Kees saw a relationship between Sp3(t), Anubis and Osiris.²⁷

The names A-no-po, Ra-ke-da-no and Si-pa-ta-no found on Linear B tablets from Pylos suggest, though by no means prove, that Anubis—>Inpw in Egyptian—Lakedaimōn and possibly Spartan were names known in Bronze Age Messenia.²⁸ For the last two and a half millennia there have been speculations as to why Spartans should also have been called Lakonians or Lakedaimonians. To examine this question it would seem helpful to look at a traditional story about Sparta recorded in Plutarch’s essay on Lykurgos: “The boys make such a cult of their stealing that one of them, as the story goes, who was carrying under his cloak

a young fox [σκύμνον, whelp, young of animals] which he had stolen, suffered the animal to tear out his bowels with its teeth and claws and died rather than have his theft detected.”²⁹ This story is extremely rich mythologically. The attitude to theft indicates the cult of Hermes, god of thieves, whose special connection to Sparta will be argued further below. The tearing out of bowels might also be a distant reflection of mummification over which Anubis presided.

“Suffered . . . to tear out” is a translation of *σπαρασόμενος*, passive participle of the verb *σπαράσσω*. This form may, like *speirō*, derive from a causative /s/ before the Indo-European root **par* “causing to part.” Pokorny cites the Old Icelandic *spior* “rag, torn strip of cloth.”³⁰ The choice of *sparassō* fits both with the phonetics of Sp3(t) and the semantics of Anubis and jackals. According to Liddell and Scott, *sparagma* means “piece, shred or fragment” but specifically “mangled corpses.”³¹ According to them *sparassō* means “tear, rend esp. of dogs carnivorous animals and the like.” They go on to cite a sentence in which flesh is torn from bones.

These connotations of the root *spar* tie in well with the most plausible etymology for the names Lakōn and Lakedaimōn: the verbs *lakiō* *laskō*, stem *lak-*, with a wide semantic range but a focus on three themes—howl, rend and crack bones. These canine associations were clearly seen in antiquity. Thus Lakōn could be explained as “howler, render, bone cracker” while Lakedaimōn would be “howling spirit.”³²

Jasanoff and Nussbaum have three objections to this etymology. First, they state that Greek compounds consisting of a verb and a noun are always adjectives. Even if one accepts this assertion, the attested adjectives *lakedaimōnos* and *lakedaimōnios* could have formed before the noun *Lakedaimōn*. Similarly, their objection that the second element, *-daimōn*, had to be the object as opposed to the subject of the verb is another example of misplaced precision. As the authoritative grammarian of Greek H. W. Smyth wrote, “the Greeks did not think of any actual case relation as existing in these compounds, and the case relation that exists is purely logical.”³³

Jasanoff and Nussbaum’s third, and major, objection is to the segmentation *Lake-daimōn*. They argue that “the Mycenaean personal name *ra-ke-da-no* . . . is almost surely to be read as *Laked-ānōr* . . . showing that the correct segmentation of *Lakedaimōn* is not *Lake-daímōn* but *Laked-aimōn*.”³⁴ Jasanoff and Nussbaum’s failure to acknowledge Oswald Szemerényi as the author of this hypothesis gives it a spurious “scientific”

validity. In fact, Szemerényi's hypothesis is generally seen as idiosyncratic. Jasanoff and Nussbaum wisely do not venture an etymology of their own, but Szemerényi proposed that the first segment was originally not Laked- but Laken-. The latter would be related to Lakōn, Laconian. Szemerényi further offered that Aimōn should be linked to Haimōnes, a people Stephanus reported to be living in Thessaly and other parts of Greece.³⁵ Chadwick hesitated on the proposal, while Chantraine calls it "ingenious" but remains doubtful. Before setting out his hypothesis, Szemerényi admitted that "all interpreters, both ancient and modern, agree that the division is Λακε-δαίμων."³⁶

"Spirit of Anubis"

Lakedaimōn could well be a Hellenosemitic calque for the Egyptian K3 inpw "spirit of Anubis" Kanōpos. In Ptolemaic times the city of Kanōpos or Kanobus stood near the mouth of the westernmost, Kanōpic branch of the Nile. As there is no attestation of an Egyptian toponym *K3 >Inpw, it is generally assumed that the name originated in Greek—from Kanōpos the legendary steersman of Menelaos, king of Sparta. The shifting courses and the names of the branches of the Nile are subjects of great complexity. Gardiner, however, is convincing when he associates the Kanōpic branch of Ptolemaic times with Rammesid references to K3, which he relates to the western branch of the river called Agathodaimōn "Good Daimōn" by Ptolemy the geographer and astronomer, among many other things.³⁷ I believe that the connection is strengthened if, instead of reading the relevant hieroglyph 𓆎 (D29) K3 as Gardiner does, one reads it, as I should prefer, as K3 nṯr "sacred Ka." I believe that there are grounds for identifying Agathodaimōn with K3 >Inpw and Kanōpos. In his study of the concept of Daimōn, Walter Burkert pointed out that "only in one special case does Daimon appear in cult and iconography: as Good Daimon, *Agathos Daimōn*. The first libation at wine drinking . . . is made in his honour." Burkert then quotes the libation of the godlike Phaeacians to Argeiphontes [Hermes].³⁸

For the following reasons, I believe that it is fair to associate Agathodaimōn and the Kanōpic, the branch of the Nile, with Anubis. In the first place there is the later name Kanōpos; second a major city on the branch was Hermopolis "city of Hermes," the Greek counterpart of Thoth and Anubis.³⁹ In Egyptian cosmology the west was the direction of death; therefore, it would be appropriate for the westernmost channel

to be associated with Anubis, who lead the dead to the afterlife. For these reasons, in addition to the fact that the name is easily explained in Egyptian but inexplicable in Greek, it would seem very unlikely indeed that the name Kanōb/pos was Greek rather than Egyptian.

At least since the time of Hekataios of Miletos in the sixth century BCE, the legendary Kanōbos of Amyklai in Lakonia was seen as the pilot to Menelaos. He apparently was the cause of the king's landing in Egypt at Kanōpos where Kanōbos was bitten by a snake and died.⁴⁰ He was supposed to have given his name to Canopus, the star otherwise known as Alpha Carinae [boats]. It is the second brightest star in the heavens, after Sirius. At least since the Ptolemaic period the star was portrayed as the guide of the ship constellation Argo, which is associated with Osiris, lord of the dead.⁴¹ It is interesting to note that in Ptolemaic times Osiris was worshipped at Kanōpos as a vase or boat with a human head. According to Plutarch, Heraklides of Pontos, of the fourth century BCE had maintained that the famous oracle of Kanōpos was one of Pluto.⁴² In general, Kanōpos was clearly associated with the realms of death and navigation thither, precisely those of Anubis.⁴³

There are further associations between Lakōn and Lakedaimōn and Anubis in his role as guardian of, and guide for, the dead. According to many mythographers Lakedaimōn was the child of the nymph who gave her name to **Ταῦγετος**, the mountain range between Lakonia and Messenia.⁴⁴ The best etymology for this Taygeton is from the Egyptian T3(w) igrt "land(s) of the realm of the dead." >Igrt "necropolis" has the mountain determinative  (N25). T3w igrt is attested in the of *Coming Forth by Day* and *igrt* itself is a standard term for "necropolis."⁴⁵ The semantic case for the derivation is strengthened not only by the wild desolation of the mountain's scenery, but also by the fact that viewed from Sparta two peaks of Taygetos look uncannily like pyramids.⁴⁶

There are further local associations with death. The caves at Cape **Ταινάρον** at the southern tip of Taygetos were generally supposed to be the entry to the underworld.⁴⁷ The cape's patron was Poseidon, the counterpart of the Egyptian Seth, but also the cave was guarded by the monstrous dog Kerberos who had Anubian and other Egyptian aspects.⁴⁸ The guide to the caves was Hermes.⁴⁹ Thus, all in all, jackals and other canine carrion eaters, together with Anubis Sp3(t) and the Underworld, seem to provide themes that can link Sparta to Lakedaimon and Lakonia.

Another possible link between Lakōn and Anubis is that a subsidiary meaning of Lakōn was "a throw in dice." Anubis as guide to the dead

played a prominent role in various Egyptian and other board games, most of which appear to have originated as attempts to discover how the soul would fare after death. Many pieces were shaped as the heads of dogs and other canines. We know that these games were played in the seventeenth century BCE not only in Egypt but also in Hyksos Palestine.⁵⁰

Another indication of this association comes from the fact that the *katōn lakaina* was a well-known type of hunting dog. A fifth century monument to Apollodoros and Lakōn, sons of Lakōn, was surmounted by a relief of a dog.⁵¹ The links among dogs and Lakonia and Sparta are strengthened by the fact that one of the four villages that originally made up the city was called Κυνόσουρα “dog’s tail” and its inhabitants Kynosuris, the name of a breed of Spartan hounds.⁵² Stephanus listing Kynosoura, a height in Arkadia, stated that it was named after the *kynosouron* “dog, dog’s tail” of Hermes.⁵³ Hermes’ association with dogs, and hence with Anubis, is increased by the characteristic headgear of the Greek god: a κυνέη “dogskin cap.”

Hermes

Now we come to Hermes. He was a composite deity with many disparate attributes and functions.⁵⁴ It would seem useful at this point to consider the Greek god’s name, which is probably neither Indo-European nor Egyptian but Semitic.

The conventional derivation for Hermes is from ἔρμα (H) “cairn or post.”⁵⁵ There is, however, no secure Indo-European etymology for *herma* itself. It would seem better to derive *herma* from the Canaanite *ḥērem* (<*ḥarma*) “taboo, banned,” which had many associations with stones and cairns. As in other cultures, the religions of many Semitic-speaking peoples identified the sacred and the vile. Both were seen as set apart and untouchable. Thus an Arab monarch’s wives live in a *ḥaram* and, more importantly, religious and damned sites are under the same *ḥērem* or “ban.”⁵⁶ Stoning appears to have been the penalty for such a ban on an individual. This would make sense to the extent that the tribal god represented or *was* the community and that stoning was a communal punishment.⁵⁷ Chapter 7 of the *Book of Joshua* is concerned with the *ḥērem* placed by Yahveh, through Joshua, on Jericho. This ban culminated with the violator, who had stolen treasure from the destroyed city, suffering the following fate: “Then all the Israelites stoned him to death; and they raised a great pile of stones over him which remains to this

day.”⁵⁸ A perceived connection between Hermes and this form of punishment in the Aegean can be seen in the statement by the historian Xanthos of the fifth century BCE that the gods in anger stoned Hermes after his acquittal for the murder of Argos.⁵⁹ This shows a relation between cairns and stoning as punishment in both southwest Asia and the Aegean.

Such a doubling can be seen in Arabia today. According to Muslim tradition, the village of Mina or Muna near Meccah is stoned by demons at all times of the year except during the *haj* when a sacred fair is held there. In the village are three small pillars, which it is the duty of all *hajjī* to stone. The stones have to be wrapped in sacred garments, the *iḥram* or *herem*, and immediately after the lapidation pilgrims remove the garments that they have worn throughout their time in the *ḥaram* or sacred territory of Meccah. Here as elsewhere cairns and pillars are considered to form its boundary.⁶⁰ Thus a Semitic origin for *herma* as “sacred pillar or cairn” would seem plausible in the absence of any convincing Indo-European alternative.

Ḥarmāh “asylum” is the name of a Canaanite city.⁶¹ Similarly, Ἄρμα seems to have been the name of a well-defended site in Boiotia.⁶² It was also the name of a sacred crag in Attika.⁶³ Such a mountain name does not to my knowledge exist in the Levant, but the highest peak in the Anti-Lebanon range is Mount *Ḥermôn*, which comes from the same root with the addition of the common Canaanite suffix *-on*. The name certainly indicates its sanctity. It may also have referred to its function as a boundary.⁶⁴ The same toponym appears in Greece as Ἐρμιών, Ἐρμιόνη found in different places. The most famous of these, the one in the Argolid, housed ancient and important sanctuaries.⁶⁵ In the Argive Hermione the sanctuary of Eileithuia was called *Masēs*. The *Prmst* “house of birth,” known to Egyptologists as *Mamissi*, was the name of a relatively small chapel found on the grounds of major temples. They are most frequently known from Ptolemaic or Roman times but one is attested as early as the Eighteenth Dynasty.⁶⁶ The connection with Eileithuia, goddess of childbirth, strongly points to this etymology.

At this point we should consider another Semitic verbal root *√hrm* “to pierce, make a hole.” From this root are derived such forms in Arabic as *taḥrima* “lacework, open work, filigree” and *muḥarram* “done in open work, filigree,” from which come the French and English macramé “lace and fringed borders.” The merger in Canaanite of */h/* with */ḥ/* made the old *ḥrm* into *hrm*. This change is attested in the biblical Hebrew *ḥāram*

“to slit or perforate the nose” and *ḥērem* “net.” In Phoenician *ḥrm* is “maker of nets.”⁶⁷

Despite the phonetic barrier between /*h*/ and /*ḥ*/, it is possible that *ḥrm* and *hrm* were originally connected. *Hērem* “ban,” in the sense of being possessed, caught or tied down by god, may well be derived from a wider root. A parallel for this semantic association is found in the Egyptian *i3dt* “net” and *i3dt* “tract of land” and later “sacred enclosure.”⁶⁸

Nevertheless, it helps to distinguish the two Semitic roots when considering different aspects of the root *ḥrm* in Greek. *Hrm* from *ḥrm* “perforation net,” already wide ranging in Canaanite, has been extraordinarily productive in Greek. At least three branches have diverged:

First: another meaning of **ἔρμα** (H) *hermata* is attested: “earring, band, noose or snake’s coils.”

Second: **ἄρμα** (H), **ἄρμή** (5), **ἄρμός** (5) all have the general sense “to tie, join together.” Chantraine points out that the Mycenaean *amo*, dual *amote*, plural *amota*—like *harma*—does not mean “chariot” but rather “parts of a chariot.” These would need to be assembled or fitted together. **Ἀρμενα** (H) is the “tackle of a ship.” **Ἀρμόζω** is “to mesh, fit together.” This then leads to **ἁρμονία** (H) “joint in carpentry and masonry.” *Harmonia* is also fitting together on the musical scale but it can also mean “necklace.”

Third: the words based on *horma*—**ὄρμος** (H) is a “cord, chain, necklace, mooring line or anchorage.” From the last comes the meaning “haven.” **Ὀρμαθίζω** “to string together” is used metaphorically as “to reason.” *Hormia* is a “fishing line” and *hormiantonos* and *hormeutes* “fishermen.”

Having completed this excursion, I think the least unsatisfactory primary etymology for the name *Hermes* is from the Semitic root *ḥrm*/*hrm* in the sense “penetrate, pierce, string together.” In Chapter 19, I discussed his relationship to the planet Mercury passing from and leading souls from one sphere to another.⁶⁹ This sense is found in **ἑρμενεύς** (5) “interpreter.” This meaning does not exclude as a secondary source the conventional derivation from the Hellenosemitic *hermata* “cairns or pillars used as boundary markers” as another of the origins of *Hermes*’ name.⁷⁰

Hermes appears to be one of the few inaccuracies in Herodotos’ list of divine names, in that he did not exclude it from the Egyptian ones.⁷¹ The Semitic name does not rule out the derivation of many of *Hermes*’ attributes from his acknowledged association with Thoth and Anubis and his unacknowledged connection to Seth.

Anubis and canines

Returning to Anubis, we can note that Plutarch wrote on an abstract level:

when Nephthys gave birth to Anubis, Isis treated the child as if it were her own; for Nephthys is that which is beneath the earth and invisible, Isis that which is above the earth and visible; and the circle which touches these, called the horizon, being common to both has received the name Anubis, and is represented in form like a dog; for a dog can see with his eyes both by night and by day alike.⁷²

This amphibiousness and potential for mediation is shared by the moon, the heavenly light in the darkness while the sun is in the underworld.

Another aspect of the Greek god does not fit the ancient scheme. It is what I would call the Osiran one: Hermes the ithyphallic progenitor of herds. He was the patron of a vineyard in Lemnos where he was known as Kadmilos—the Canaanite name Kadmy^c el “El is the old one” is attested in the Bible.⁷³ This aspect is particularly evident in Attika, Arkadia and the northern Aegean, all areas of considerable continuity with the Bronze Age. Some of these features may come from confusion with *hermai* and rock cults. Others could well derive from the indigenous population of the Middle Bronze Age. Herodotos maintained that

These practices then, and others which I will speak of later, were borrowed by the Greeks from Egypt. This is not the case however, with the Greek custom of making images of Hermes with the phallus erect; it was the Athenians who took this from the Pelasgians and from the Athenians the custom spread to the rest of Greece.⁷⁴

Thus, we may have here a remnant of the religion of the Indo-European-speaking natives. Even here, however, there may be some Egyptian and Semitic influence. Osiris or Tammuz appears under many names in Greece. As well as Dionysos—this title is supposed to have come later than the others—although its attestation in Linear B shows that it must have arrived by the thirteenth century BCE.

As mentioned in chapters 10 and 18, I have referred to Pan and Pentheus as the Egyptian names and Bakchos as the Semitic name for “[the] bewailed.”⁷⁵ Thus, finding the dead and reviving god of nature referred to in certain regions as Hermes is not surprising, especially in

view of the fact that both Thoth and Anubis were so deeply involved in the judgment of the dead, around which the cult of Osiris also revolved. What is more, as pointed out above, in some Egyptian theologies a relationship existed among Sp3, Anubis and Osiris.

All of this leads us back to Sparta and the cult of Hermes as the messenger of death and the guardian of the dead. Farnell claimed that "in Laconia his cult was neither prominent nor important."⁷⁶ Plutarch's report of the strange Spartan attitude to theft—of which Hermes was the patron—the story of the fox and the importance of Hermes at the entrance to the Underworld at Tainaron, all taken together indicate that he was indeed important. There is, however, a much more obvious sign of his centrality and Farnell seems to have missed its significance entirely. This was the archaic statue of Hermes carrying an infant Dionysos that Pausanias saw in the middle of Sparta.⁷⁷ Its centrality was more than geographic, as the figure appeared frequently as an emblem of the city on coins issued in Sparta during the Roman period.⁷⁸ Pausanias called the statue *Agoraios* "of the market place" but this—in anticommercial Sparta of all places—is unlikely to have meant that this Hermes was exclusively concerned with trade. The theme was clearly that referred to in the fifth century CE by the Hellenized Egyptian, Nonnos: "Thus Hermes carried upon his arm the little brother who had passed through one birth without a bath, and lay now without a tear, a baby with a good pair of horns like the Moon. He gave him in charge of the daughters of Lamos, river nymphs, the son of Zeus, the vineplanter. They received Bakchos into their arms."⁷⁹

The same motif of Hermes carrying Dionysos appears on a vase from Campagnia and on a coin from Pheneus in Arkadia. It is also seen in the famous statue attributed to Praxiteles and found at Olympia.⁸⁰ The figure survived into late antiquity when it appeared in a mosaic from Antioch in which the child Dionysos has a halo. The motif is clearly the origin of the Christian iconography of Saint Christopher.⁸¹ The early forms of the Christian legend, showing the divine child on his protector's shoulders would seem to be closer to Egyptian vignettes—unnoted by the historians of classical art—in which the child Osiris is carried to heaven on a god's back.⁸² These vignettes are on a papyrus from the Nineteenth Dynasty. As Anubis is the only male guide and protector of Osiris, he is almost certainly the god represented. The theme of a person or deity carrying a childish Osiris is also common in later Egyptian sculpture, especially from the Saite Dynasty.⁸³

The motif of Hermes carrying Dionysos to immortal protection was frequently represented in Greek art, but in a disguised form: Hermes Kriophoros “carrying a ram.” This image of a “good shepherd” with a sheep carried over his shoulders or in some other way is obviously of general attraction. Nevertheless, its significance as an artistic motif in both the Levant and the Aegean—where the statuette of Hermes Kriophoros from Arkadia, mentioned above, shows it to have been very ancient—can be pinned down with more precision. The identification of a young sacrificed prince with a ram or lamb is found in Canaanite and Greek mythology, in the biblical *Akedah*, or “binding of Isaac,” and in the myth of Athamas.⁸⁴ Osiris’ identification with a ram or goat in Egypt and Libya will be discussed below in connection with Dionysos’ close relation with these animals in Greece.

As far as I am aware, no Egyptian representations show Anubis or anybody else carrying the Mendesian ram or goat with which Osiris was identified. Nevertheless, men and rams are pictured together as, for instance, in an Eighteenth Dynasty blue faience scarab found in a geometric level at the shrine of Artemis Orthia at Sparta.⁸⁵

In the quotation from Nonnos given above, the infant Dionysos is given horns. Apollodoros was equally specific: “But Zeus eluded the wrath of Hera by turning Dionysos into a kid and Hermes took him and brought him to the nymphs.”⁸⁶ This theme is the same as the Egyptian one in which the child Osiris is taken to heaven. In the latter case it is clear that, as in Christianity, the rise from death to immortality of the child god stands for a similar rise for the individual worshipper. Thus, Anubis is concerned with guiding worshippers through death to heavenly bliss.

Amyklai and Hyakinthos

Motifs of this type had a prominent position on the throne of Apollo at Amyklai, the greatest religious center in Lakonia, which seems to have been built in the seventh or sixth century BCE.⁸⁷ According to Pausanias, these included scenes in which “Hermes is carrying the child Dionysos to heaven, and Athene is bringing Herakles to live with the gods forever after, Peleus is handing over Achilles to be brought up by Chiron.”⁸⁸ The other themes are mainly of heroic victories over monsters.

This description raises the problems of the cult of Apollo at Amyklai and of the identity of the dead deity Ὑάκινθος whose tomb was at the center of the shrine. In late antiquity Hyakinthos was supposed to have

been a Lakonian youth with whom Apollo fell in love and whom he killed by accident.

For the romantic scholars of the nineteenth century the cult symbolized the Aryan and Dorian conquest. It was their god Apollo's triumph over the pre-Hellenic and chthonic Hyakinthos, a mysterious and dark spirit of vegetation altogether appropriate to the static Pelasgians.⁸⁹ Recent scholarship has modified this picture but not fundamentally altered it. Hyakinthos is no longer seen as pre-Greek. His cult is believed to have started in Lakonia in the Late Bronze Age. From there the Dorians carried it to Crete and other Dorian islands.⁹⁰ The sharp division between Hyakinthos and Apollo is maintained on these islands and worship of the latter is seen as an Iron Age imposition upon the earlier cult.

Paul Cartledge, who centers his work regarding Sparta on the cult at Amyklai, quotes Rhys Carpenter with approval on the "philological game of hopscotch." This, Cartledge says, "is best exemplified in Astour 1967. . . . Like hopscotch this sort of approach explains nothing and gets you nowhere."⁹¹ Unfortunately, for scholars like Dr. Cartledge, this brand of archaeological positivism has not moved the problem forward either. Luckily, other classicists have not been so blinkered. Some, like Burkert, Willetts, Dietrich, and West, have considered the name Amyklai and the implications of its etymology.⁹² The key piece of evidence is a bilingual inscription found at Idalion in Cyprus and dedicated in Greek to A-polo-ni A-mu-ko-lo-i (Apollo Amyklos) and in Phoenician to Rsp Mkl (Resheph Mikal). As Resheph is generally acknowledged to be the Phoenician counterpart of Apollo there has never been any doubt about the connection between this cult and the Lakonian one.

For Farnell the answer was obvious: the Amyklean cult was brought by "Achaean" settlers from Lakonia to Cyprus.⁹³ The worshipers at Idalion, however, seem to have been Phoenician not Greek. Furthermore a Canaanite cult of Mkl was located at Beth Shean in Palestine in the Late Bronze Age.⁹⁴

Both Albright and Astour have agreed that Mkl—probably vocalized *Mukol or *Mukal—originally came from the Emesal or the women's dialect of Sumerian and that the last syllable is *gal* "great," which was regularly transposed into West Semitic as *kal*. For instance, the Sumerian *E gal* "big house" became the Canaanite *hêkâl* "palace, temple." Albright proposed an origin for Mukal from the Emesal title Umun-urugalla "lord of the great city" for the Mesopotamian deity Nergal "lord of Hades."⁹⁵ Astour more plausibly argues that Mkl derived from *mu-gal* "great tree,"

which is attested as a divine name and possibly appears in the common Akkadian name Mu-ka-la/li. He has also pointed out that this meaning would fit neatly with representations of Amyklai on Lakonian coins where the shrine is depicted as a pillar or inverted tree trunk, narrower at the bottom than at the top, with an arm and a helmeted head.⁹⁶

At this point in the discussion all that is necessary to indicate is that, in this instance at least, Astour has “got us somewhere,” however, much Dr. Cartledge may dislike its location. Astour has made it clear that the name (A)myklai is connected to Resheph/Apollo, that a pillar on a tree trunk spread from the Levant to Cyprus and Lakonia at some stage, and that the Spartan town coined its name from this depiction. Left open is the question of whether or not an earlier cult of Apollo existed at that site. Before tackling this question, however, we should consider the festival of Hyakinthia as a whole.

Hyakinthia

The festival of Hyakinthia took place in the spring. Hyakinthos was mourned on the first day, then there was a solemn banquet without bread or wine. The next two days appear to have been joyful celebrations of victory and rebirth and the possible ascension to heaven generally associated with Apollo.⁹⁷ Seeds and agriculture were an important theme. Hyakinthos’ age seems to have varied. At times he was a ravishing youth but, as Pausanias pointed out, a more ancient sculpture represented him as bearded.⁹⁸ Nevertheless, he was also a divine child, *enīautos daimōn*. Goats seem to have been sacrificed at the festival and were a central symbol of it. One often appeared next to the “tree trunk” Apollo on the coins referred to by Astour.⁹⁹ So too did a cock, the symbol of the resurrection, and Apollo’s double Asklēpeios, as discussed in Chapter 19.¹⁰⁰ The Hyakinthia was of course associated with a spring flower, although the original “hyacinth” was probably an iris.¹⁰¹

In fact Hyakinthia had striking correspondences with the Christian Easter. The first day is spent mourning the young god’s death with the solemnity transformed—in the Orthodox Church—by the cry of *Khristos aneste* “Christ is Risen” and followed with general rejoicing. The pattern is, however, very common. It fits, for instance, the Egyptian festivals in which Isis’ sorrow for the dead Osiris was marked with wailing and mourning and then followed by ecstatic joy at Osiris’ resurrection or the triumph of his son Horus. Nonnos drew a clear parallel between

Hyakinthia and the Eleusinian ritual of resurrection, which was also based on Egyptian festivals of Osiris. Nonnos described the rituals in two successive poems. The first was on Demeter and Eleusis. The second was in the Amyclean style:

Apollo brought to life again his long-haired Hyacinthos.
Staphylos will be made to live for aye by Dionysos.¹⁰²

Despite the confusion between the Dionysiac Staphylos “grape” and Dionysos himself, all three—Hyakinthos, Dionysos and Staphylos—can most plausibly be seen as forms of Osiris, god of the Nile flood and wine, as discussed in Chapter 18.¹⁰³

Apart from this and the cultic parallels mentioned above, no other connections between Hyakinthia and Egypt are apparent. The first day of the fast then festival was called **Kοπίς**. This can plausibly be linked to the stem *kop-* “to be weary” and *kopeto-* “noise of lamentations.” Although there is a good Indo-European etymology for the Greek stem *kop* in the sense of “chop,” there is none for it in this other sense. It would seem plausible to link *Kopis*, a day of fasting, to the Egyptian *gb* “deficiency, deprivation” and *gby* “to be feeble, miserable.” In Coptic these appear as *ḡb* or *ḡb*.

On another point, just as Osiris had his sister companion Isis, Hyakinthos had his sister Polyboia who accompanied him to heaven. Although it generally simply means wealthy, the name “many cattle” suggests connection with the cow goddess Hathor who was identified with Isis at—it is interesting to note—Kanōpos.¹⁰⁴ All of these components—the meaning of the name Amyklai, the derivation of Apollo’s ancient title Paiōn from his equivalent Horus’ epithet P3 iwn “the pillar,” worship of a tree trunk and goats, and the theme of resurrection—bring Hyakinthia extraordinarily close to the cult of Osiris as the Mendesian goat and a Dd or lopped tree. Along with the other evidence of Egyptian religious influence in Sparta discussed above, that the Hyakinthia was based on a festival of Osiris, specifically on the great W3g set at the beginning of the Nile flood, seems plausible. In this case one could derive Hyakinthia from *W3g ntr “holy W3g” and view Hyakinthos, not as a divinity in his own right, but merely as the personification of the feast. No doubt exists that Hyakinthia the festival was far more widely known than Hyakinthos the hero.¹⁰⁵

Given the intensity of the taboo on Osiris’ name (discussed above),

the desire to find alternatives is understandable and the semantic correspondence between Hyakinthia and *W3g n̥r would seem quite good. The phonetic fit is also reasonably satisfactory.¹⁰⁶ Aspiration was automatic with the upsilon. Indeed, Frisk and Chantraine accept the claims of their predecessors that the name was originally *ῥάκινθος*. With the neutralization of stops, the shift from /g/ to /k/ is quite acceptable. The many parallels where the Egyptian *n̥r* was found in the Greek -nthos were discussed in Chapter 10.¹⁰⁷ The case that *kantharos* and *katharos* derive from k3 n̥r has been made in that previous chapter. These names resemble that of the Theban hero Káanthos, another Osiris figure who, like Hyakinthos, was killed by Apollo.¹⁰⁸ Hyakinthos' relation to *hyacinth* fits the common pattern of young heroes whose life blood flows into a flower that is brilliant but quickly fades: Adonis, Attis, Ajax and, of course, Kaanthos and Hyakinthos.¹⁰⁹

"LATE" BORROWINGS AND LYKURGOS

Orgē and *orgia* were borrowed from w3g in the Bronze Age when /3/ still had consonantal value. Hyakinthos was copied from *W3g n̥r after /3/ had lost this value, therefore, relatively late. In such "lateness" Hyakinthos would seem to resemble some other Lakonian names. Taygetos must have come from T3w igr̥t, not only after the vocalization of /3/ but also after that of /r/ in certain positions. This, however, does not tell us whether or not these introductions came before or after the collapse of Mycenaean society in the twelfth century BCE.

We have then to face the question of continuity and change between Bronze and Iron Age Lakonia. Following the fashionable preference for indigenous developments, recent observers have tended to see the palatial age ending in a revolt rather than an invasion.¹¹⁰ This account would tally with such features as the apparent return to Middle Bronze Age cultural traits during this period and makes a plausible partial explanation.¹¹¹ Nevertheless, as Paul Cartledge rightly points out, some features cannot be explained simply by the hypothesis of local revolt.¹¹² First is the universal belief during antiquity that the Dorians invaded from the north with the return of the Heraklids. Second was the presence of Dorian tribes who in historical times believed themselves to have come from northern Greece and who spoke what appears to have been a northwestern Greek dialect. Thus the most plausible explanation would seem to be that, as with many other invasions notably those at the end of the

Roman Empire, the outside barbarians received considerable support from poor people crushed by the oppression of ruling class civilization.

Although it gives no direct evidence of an invasion, archaeology confirms that a drastic change occurred when tradition maintained that the Heraklids had “returned.” In Lakonia the population appears to have fallen sharply in the twelfth and eleventh centuries, although some centers like Amyklai it actually increased during this period. The tenth century seems to have been even more depressed, which has led Paul Cartledge to argue, rather unconvincingly, that the invasion or infiltration of the Dorians took place considerably later than the legendary return of the Heraklids.¹¹³

As Thucydides claimed, the succeeding period was very unstable. According to traditional historiography, however, the situation was transformed by **Λυκοῦργος** who established such excellent institutions that Sparta suffered no internal disruption for several centuries.

Plutarch opened his biography of the statesman: “Concerning Lycurgus the lawgiver, in general nothing can be said that is not disputed, since indeed there are different accounts of his birth, his travels, his death and above all his work as a lawmaker and statesman; and there is least agreement among historians as to the times in which the man lived.”¹¹⁴ Following the tradition of critical scholarship some modern writers have denied his historicity altogether and see him as a god.¹¹⁵ To back their case, they have the Delphic oracle reported by Herodotos:

I know not whether to declare
you human or divine—
Yet I incline to believe Lykurgos
that you are a god.¹¹⁶

There is no question that myths seem to have accreted to Lykurgos. Nevertheless, there seems no reason to doubt the ancient conclusions that he was a member of the Spartan Europontid royal family, that he lived some time in the ninth and early eighth centuries, that he traveled extensively and that he introduced important institutional reforms.¹¹⁷

Lakonian archaeology has been particularly uninformative about chronology because there seem to be no detectable changes in pottery styles between 950 and 750 BC. Nevertheless, major changes were clearly taking place during the second half of this period. Both wealth measured by imports from other parts of Greece and the Near East and by local

production increased strikingly. These economic changes have been convincingly linked to the beginnings of Sparta's piecemeal conquest of Messenia.¹¹⁸ It would seem plausible to associate these changes with the institutional ones, as does ancient tradition attributed to Lykurgos at about this time.

Tradition maintained that Lykurgos had traveled widely. Plutarch felt unable to accept all the claims but he did believe that the lawgiver had visited Crete, Ionia, Asia and Egypt. According to the later writer, Lykurgos was not impressed by Ionia. Although he was supposed to have introduced the Homeric epics for their moral value, there is no mention of any institutional borrowing.¹¹⁹ Very few scholars would challenge the likelihood of Lykurgos' having been to Crete, which was close to Sparta and was dominated by Dorians. That he used their institutions as models would seem altogether plausible in view of the similarities between those of Crete and Sparta in historical times. This was brought out clearly by Aristotle in *The Politics* when he saw both as the best examples of mixed constitutions.¹²⁰ Aristotle bracketed these favorite Greek constitutions with that of Carthage with which they shared remarkable similarities, as Robert Drews has clearly shown.¹²¹ Given the much earlier attestation of these structures in the Levant and the general cultural flow in the ninth century, the Cretan and Spartan systems must have borrowed from Phoenicia rather than the other way round. Thus, the overall derivation of the Greek *polis* from the Phoenician city-states would seem to be particularly closely linked here.¹²²

These political borrowings were part of a much larger whole. The tenth and ninth centuries saw the peak of Tyre's prosperity and power. Recent archaeological assessments tend to confirm Homer's picture of a Phoenician domination over eastern Mediterranean trade in this period.¹²³ Spectacular caches of Phoenician goods have been found in ninth century strata in Crete and the stylistic innovations of the Cretan "Proto-Geometric" and the Attic Middle-Geometric (c. 850) were clearly the result of Levantine influence.¹²⁴

The Cretan and Lakonian alphabets appear to have been deeply affected by what, in *Cadmean Letters*, I have called the Phoenician or Iron Age waves of influence that sharply modified the Bronze Age Hellenic alphabet.¹²⁵ Interesting loans of constitutionally important words also occurred: for instance, *kaddikhos*, the term used for a "voting urn" or "bowl" in the Spartan messes almost certainly comes from the Late Canaanite *kad* "jar."¹²⁶ Equally, *leskhē* "lounging place, council hall" is

clearly related to the Hebrew *liskāh* “a room connected with a sanctuary where sacrificial meal was eaten.”¹²⁷ Among the Dorians, Phoenicians and Jews, as well as Greeks Etruscans and Romans, lounging on a couch was the status symbol of a freeman. John Pairman Brown has pointed out that Pausanias described a painted *leskhē* with accompanying shrines dedicated to the hero Kadmos.¹²⁸ Interestingly, however, neither of these words has a clear Semitic root. The most likely origins are ultimately from the Egyptian *qd* “pot” and *r-ski “place for passing time.”¹²⁹

This leads back to Lykurgos’ contacts with Egypt. Both Diodoros and Plutarch stated that Egyptians believed him to have studied in Egypt and to have borrowed social and political institutions from there. Plutarch did not commit himself to this idea but he admitted that some Greek historians had also shared this opinion.¹³⁰ Nothing is inherently implausible about the idea of Lykurgos, or other Spartans with whom he may have been conflated, visiting Egypt at this time. No navigational difficulties would hamper it and, even in its disunity at the end of the Twenty-second and the beginning of the Twenty-third dynasties, Egypt, by contemporary Greek standards, was immensely rich and possessed the towering cultural prestige of two and half millennia of civilization. In fact, archaeological evidence suggests that there were substantial contacts between Sparta and Egypt in the early eighth century. Many Egyptian objects have been found in the lowest stratum of the sanctuary of Artemis Orthia near Sparta. Furthermore, as Pendlebury pointed out:

Besides these objects, one has only to look through the pages of any work on early Spartan statuettes to see a striking resemblance to Egyptian examples. This resemblance is chiefly due to the presence of a wig—or it may be some method of dressing the hair which gives a general likeness to the Egyptian wig or striped head cloth.

The cautious scholar then added to this unorthodox observation: “Whether this is due to a definite Egyptian influence or to mere coincidence it is hard to determine.”¹³¹

LAKONIAN TERMINOLOGY EGYPTIAN?

In this context it is striking to find so many specifically Spartan political terms that lack Indo-European etymologies but have plausible ones in Egyptian: *λόχος* in the sense of a “military company” would seem to

come from the Egyptian *rhȳt*, *l hē* in Old Coptic “subjects, plebeians.” Another example is Ὀβαί, a local division of the Spartan people. *Obazō* meant “to divide people into *obai*.” A plausible etymology for these Spartan terms would be the Egyptian *wpi* “to divide” and the substantive *wpiwt* “household, crowd, inventory.” *Opa* appears frequently in Linear B. Chadwick translates it as “contribution.” This meaning would fit *wpi* in the sense of “division of people or goods.” As mentioned in Chapter 19, the related Egyptian verb *ip* “to count” with the preposition /r/ *ip r* “to be detailed for task” provides a plausible etymology for the otherwise unexplained Lakonian ἀπελλάζω “to assemble” and ἀπέλλαι “assembly, especially of young people.”¹³²

Spartan messes of men who ate together were called φιδίτια. Plutarch derived this from *philitia* because they were conducive to friendship. Alternatively, he also suggested the derivation from *editia* “eating.”¹³³ A more likely etymology for this is from the Egyptian *pdt* “troop of soldiers.” The vocalization of the first syllable was clearly /i/, which remained constant in Egyptian when long and accented. Its presence in the name Lapith from R-*pdt* was mentioned above in Chapter 9.¹³⁴ It can also be seen in the Coptic form *pīte* for the Egyptian *pdt* “bow,” which seems to have been the basis for the root. Finally, there is the Spartan term Εἰλωτες (5) “helots.” No satisfactory Indo-European etymology exists for this famous word.¹³⁵ Here again there is a more plausible Egyptian etymology *hryw t3 “those who are on the land” analogous to the attested form *hryw š ʔ* “those who are on the sand, Bedouin.” This word would parallel the biblical *ʿammē hāʾāreš* “peoples of the earth [the Canaanites, who inhabited the land before the Israelites].”

No linguistic grounds exist for claiming that these copies date from the Iron Age. Two other reasons, however, can be postulated. First, the use of these words is restricted to Sparta. If they had been borrowed in the Bronze Age, they more likely appear elsewhere. Second, a strong tradition holds that Lykurgos based at least some of his institutional reforms on Egypt. The new forms were not imported indiscriminately and Dorian tribal traditions were not neglected. Neither were the requirements of a new state ignored, especially the need to keep large numbers of Helots in perpetual and productive subjugation.¹³⁶ The existence of Cretan names with Indo-European roots for similar institutions suggests that the Spartan rulers may simply have introduced fancy Egyptian names to replace common Dorian, or more widely used, Hellenic forms. Given the conservatism of Iron Age Crete, this explanation would seem more

likely than the other possibility that the Cretans naturalized the Egyptian institutions and terms. The most plausible general motive for the Spartans' having adopted Egyptian terminology would be the desire for the Dorians to appear cultivated.

Another example of this process can be seen in the Spartan cult of the Dioskouroi. Walter Burkert plausibly sees a parallel between the Spartan Dioskouroi [sons of Zeus] and the Vedic Asvins as twins concerned with horses. He is, however, unable to explain either their curious cult fetish of two beams δόκῶνα and crossbars or their name in Sparta, Tyndaridai or Tindaridai the sons of **Τυνδάρεως**.¹³⁷ The alternation itself suggests a copying. A possible etymology for Tyndaridai can be found in the attested, but mysterious, Egyptian term *ḏnh n ḏrww*. Faulkner translates this "wing rib(?)" In Coptic *ḏnh* (*tēnh*, *tenh* or *tnh*) means "wing" and *ḏrww* means "flank, set of ribs." Gardiner wrote about *ḏrww* "since the duality of the term is often insisted upon . . . in such cases the writer was thinking of both sides together."¹³⁸ *ḏrww* was used for two opposite sides in a more general sense of chests and coffins. It may also have had architectural connotations because *ḏri*, *ḏrw* and *ḏrwṯ* all appears to have meant "walls." As far as I am aware, no matching cult existed in Egypt. The most likely explanation is that the Spartans provided Egyptian names and imagery for an indigenous cult.

Specifically, the Spartan rulers may have wanted to secure their legitimacy as Heraklids. It is very unlikely that Herodotos was being original when he saw the latter as Egyptians:

The common Greek tradition is, that the Dorian kings as far back as Perseus, the son of Danae [thus not including the god], are as they stand in the Greek lists, and are rightly considered as of Greek nationality, because even at this early date they were ranked as such, I am justified in saying 'as far back as Perseus,' and not father, [sic] because Perseus had no human father by whose name he can be called. . . . If, on the other hand, we trace the ancestry of Danae, the daughter of Acrisius, we find that the Dorian chieftains were genuine Egyptians. This is the accepted Greek version of the genealogy of the Spartan royal house; the Persians, however, maintain that Perseus was an Assyrian who adopted Greek nationality; his ancestry, therefore, was not Greek; and the forebears of Acrisius were not related to Perseus at all but were Egyptian—

which accords with the Greek version of the story. But there is no need to pursue this subject further. How it happened that Egyptians came to the Peloponnese, and what they did to make themselves kings in that part of Greece, has been chronicled by other writers.¹³⁹

The Persian version, which presumably derived from earlier Syrian and Mesopotamian records, appears to have reflected a belief that the Hyksos were more Syro-Palestinian than Egyptian. The Spartan kings' conception of their Hyksos ancestry and their claim to be Egyptian Heraklids gave legitimacy to the Dorian overthrow of the Pelopid Akhaians. This idea about their ancestry does not appear to have diminished after the eighth century when, possibly as a result of the introduction of the Homeric epics, Spartan kings established the Menelaion, a shrine to the great Pelopid king that was shaped like a pyramid. Thus, they claimed both sources of legitimacy.¹⁴⁰ A parallel to this could be seen in Queen Victoria's establishment of a castle at Balmoral, thus incorporating the romantic Highland tradition of the Stuarts into that of her own House of Hanover, which had defeated it, without abandoning the heritage of the Glorious Revolution or the Protestant succession.¹⁴¹

The building of the Menelaion leads back to the problems of the extent to which Spartan religion survived the Dorian conquest and the date of the introduction of the religious toponyms. Material evidence of a cult at Amyklai exists from the fifteenth century BCE, and the use of the toponym in Homer's particularly ancient *Catalogue of Ships* suggests that it was called by that name before the Trojan War in the thirteenth century.¹⁴² This longevity is emphasized by the possibility of continuous worship at Amyklai into historic times.¹⁴³ Thus, it seems probable that, despite the major social and political upheavals and transformations, overall religion was continuous at Amyklai. Lapses and revivals based on outside traditions, documents and sources could also have happened. The relative lateness of such Egyptian and Phoenician names as Taygeton and Amyklai could be explained by the hypothesis that they were only introduced in the fifteenth century although Hyakinthia could be later. Still, other names, notably Sparta itself with its /3/ retaining consonantal value, would be much older. Thus the centrality of the worship of Hermes-Anubis, Dionysos-Osiris and Apollo-Horus can be dated back to the beginning of the Mycenaean Age. Emphasis within the trinity may have shifted towards Apollo but a Spartan connection with dogs

was remembered to the end of antiquity.¹⁴⁴ In some sense the old identification of Hermes and Anubis seems to have been retained.

SPARTA AND DEATH

At least from the Iron Age Spartans exposed unwanted infants at the foot of the Taygetos mountains and believed that the cave at Tainaron was the entrance to Hades. Even if the name's origin from *T3 igr* "realm of the dead" may have been forgotten, the range's association with death was still strong.¹⁴⁵ In general, concern with death and rebirth into immortality was even more salient in Lakonia than elsewhere. Apart from the Trinity—Hermes, Dionysos, Apollo—the complex sets of twins in the cult of the Dioskouroi had the common feature of duality of mortal and immortal being.¹⁴⁶

It is fascinating to speculate whether the ancient preoccupation affected the later warrior cult of death among the Spartans. Plutarch does report that Lykurgos simplified burial and forbade personal tombs.¹⁴⁷ On the other hand, the ideal of sacrificing oneself for the country seems to have been promoted with extraordinary vigor. As Plutarch wrote describing Spartan songs, "they were for the most part praises of men who had died for Sparta calling them blessed and happy; censure of men who had played the coward, picturing their grievous and ill-starred life."¹⁴⁸ Spartan soldiers' willingness to die in battle was proverbial. Even boys did not protest when beaten to death at the festival of Artemis Orthia.¹⁴⁹

The centrality of this Lakonian cult of death did not stop with the end of Spartan independence. Quite apart from its persistence in Christianity, the cult of death has survived in a pure form in the Mani Peninsula at the southern end of the Taygetos, near the cave at Tainaron. In this region the most elaborate and beautiful laments of all Greece continue to be made. Central to these and to the whole conception of death here is the figure of **Χάρων**.¹⁵⁰ In classical times he was merely the ferryman of death across the river Styx.¹⁵¹ In Etruscan religion, however, Charun seems to have had a greater importance as a bringer of death. One writer called him an "infernal Mercury."¹⁵² Diodoros believed that the name was Egyptian.¹⁵³ No known Egyptian name or verbal root, however, would seem appropriate. Yoel Arbeitman proposed a more plausible etymology from the West Semitic deity *Hrn*, vocalized **Hōrōn** in the Bible and known as "lord of Hell." The name is clearly related to a

Semitic stem *h(a)wr* or *hawr* meaning “grave, pit, cavern.” The /a/ in Kharōn indicates a borrowing before the Canaanite shift.¹⁵⁴ In modern Greece Kharōn has become not only the boatman but, as happened with the Etruscans, also both Hermes, the messenger of death, and Hades, the ruler of the dead. Despite these modifications, this survival shows an extraordinary cultural tenacity for at least three thousand five hundred years.

To return to the connections that Spartan rulers saw with their supposed Egyptian or Hyksos ancestors. We know, for instance, that in the late seventh or early sixth centuries some of them or their advisers felt it worthwhile to remodel the national shrine the Menelaion as a “sort of small step pyramid.”¹⁵⁵ It is impossible to say whether this construction was simply ostentation or the result of the Homeric tradition that Menelaos had spent time in Egypt or an attempt to emphasize the royal families’ Heraklid Egyptian ancestry.¹⁵⁶ Pausanias wrote about the sanctuary of Ammon in Sparta: “The Lakonians seem to have used the Libyan oracle more than anyone else in Greece from the beginning. Ammon is not more honoured by the Libyan Ammonians than he is at Aphytis.”¹⁵⁷ What Pausanias meant by “from the beginning” is impossible to say. It could refer to the Bronze Age, to the time of Lykurgos at the turn of the eighth century, or to the Spartan “Pyramid Age” of the seventh or sixth. In any event, it is unlikely to have been much after Pindar wrote his *Hymn to Ammon* early in the fifth.¹⁵⁸ Pausanias’ only specific reference to the oracle was in connection with the Spartan general Lysander, who was active in the Peloponnesian War at the end of the fifth century.¹⁵⁹

SPARTANS AND JEWS

About a hundred years after Lysander, the Spartan King Areios I (309–265 BCE) is alleged to have written: “To Onias the High Priest, Greeting. A document has come to light which shows that the Spartans and the Jews are kinsmen descended alike from Abraham.” This letter is quoted in both Maccabbees and Josephus.¹⁶⁰

Two questions occur immediately: one on the letter’s date and the other on its authenticity. Areios I of Sparta and the first high priest, Onias, were contemporaries around 300 BCE. Areios the second died as a child and did not reign at the same time as Onias the second or third. Thus there seems no reason to follow Josephus in dating it to a later

Onias. Arnaldo Momigliano, who believed in the authenticity of most of the documents contained in 1 *Maccabees*, maintained that this letter was apocryphal. He admitted, however, that it must have been an early forgery. This dating is necessary to explain why the two succeeding letters, one of which he believed to be genuine, refer to the Jews as “brothers.”¹⁶¹ Naturally, working within the Aryan Model, he treated the idea of a relationship between Spartans and Jews as legendary and, by implication, absurd.¹⁶² In his chapter on the three letters Momigliano failed to mention Eduard Meyer’s discussion of the subject. Meyer accepted the authenticity of the letter because he believed that the “writings” [*graphē*] referred to were those of Hekataios of Abdera whose work was written about 300 BCE.¹⁶³

As mentioned above, Hekataios maintained that:

The natives of the land surmised that unless they removed the foreigners [the Hyksos] their troubles would never be resolved. At once therefore, the aliens were driven from the country, and the most outstanding and active among them banded together and, as some say, were cast ashore in Greece and certain other regions, their teachers were notable men among them being Danaus and Cadmus. But the greater number were driven into what is now called Judea which is not far from Egypt and was at that time utterly uninhabited. The colony was headed by a man called Moses.¹⁶⁴

Despite some difficulties with the phrasing of the letter, probably explained by the double translation from Greek into Hebrew or Aramaic and back again, Meyer’s hypothesis that the Spartan letter was genuine seems convincing. It leaves open, however, the question of whether the king believed Hekataios because such a belief was fashionable after Alexander’s conquests in the east or because it fitted the Spartan rulers’ own traditions. Given the information set out above, the second factor would surely have played a part. The authenticity of the letter and the idea of Spartan Jewish contacts in the second century BCE are strengthened by the fact that in the 160s BCE the disreputable High Priest Jason (Joshua) took refuge in Sparta and died there.

The last king of Sparta took the name Nabis (206–192 BCE). Despite his unusual name and his social revolutionary policies, there is no doubt that he was a Spartan and quite probably from one of the two royal families. Nevertheless, Nabis is certainly not a Greek name; it could,

however, derive from either the Canaanite *nābi*⁶ “prophet” or the Egyptian *neb* “lord.” Or it could come from both.¹⁶⁵

Thus from the Bronze Age to the Hellenistic period one finds substantial indications of Egyptian and West Semitic civilizations in Sparta, one aspect of which is linguistic. This is altogether what one should expect of the southernmost state on the Greek Mainland.

CHAPTER 22

ATHENA AND ATHENS

The Character of Athena, both in religion and in the myths, appears, then, to be the reflex of the civilised Hellenic polity. She was, it is true, sometimes identified with foreign goddesses—Egyptian, Asiatic, Colchian, or Iberian—probably because of her maidenly or warlike nature common to them with her; but we cannot say that her worship like that of Artemis or Dionysos, was tainted with Oriental or barbaric ideas, with orgiastic excess with impure symbolism or mystery . . . The tradition of Athena remained pure and clear in spite of the Alexandrine confusion of religions.

—L. R. Farnell, 1895 (p. 318)

INTRODUCTION

The names **Ἀθῆναι**, Athens, and **Ἀθηναία**, Athena, have puzzled the curious for more than two millennia. Today orthodox scholars simply consider them to be pre-Hellenic. More imaginative or fanciful observers have proposed that the names are metatheses of Athena's Canaanite counterpart 'Anat or Athena's Egyptian equivalent Nt or Nēit (in Greek transcription).¹ Athena's identification with the latter was assumed by all ancient writers. In this chapter, I shall attempt to demonstrate that the names Athens and Athena both derive from **Ḥt-nṯr (nt) Nt** "temple or city" of the goddess Nt or Nēit. In all my previous works, I had proposed an origin from simple **Ḥt Nt** but criticisms from Dr. Arno Egberts, discussed below, have made me modify my position. All three forms **Ḥt Nt**, **Ḥt-nṯr Nt** and **Ḥt-nṯr nt Nt** have been attested.²

Scholars debate whether Nt was originally Egyptian or Libyan, but the majority maintain that she was essentially Egyptian. A temple to Nēit appears to have been founded at Sais near the beginning of

the First Dynasty.³ Nevertheless, she was worshipped in Libya at least since the Fifth Dynasty in the middle of the Third Millennium BCE. Two thousand years later, Herodotos and other Greek writers saw her as originating in Libya.⁴ Her cult center in Lower Egypt was at Sais near the western edge of the Nile Delta, an area which, at least in the early dynastic periods, was influenced by Libyan culture. The Greek belief that she was Libyan dates back to at least the sixth century BCE (see below). In the following century Herodotos claimed to have seen traces of the goddess's origins in Libya.

SUMMARY OF THE CHAPTER

This summary is only an outline of the chapter and it omits many of the topics considered in it. The chief concern of the chapter is with some of the striking parallels between the cults of Nēit and Athena. It begins with a discussion of the importance of armor in both, and the striking similarities between their fetishes: for instance the shield with arrows of Nēit and the Palladion of Athena. Peisistratos' political use of a good-looking young woman in armor on a chariot was identical to Libyan rituals dedicated to [Athena] in Libya. The chapter moves on to the central significance of weaving and embroidery and the presentation of a sacred cloth in both cults. The next section is concerned with fiery night festivals dedicated to the goddess in both Sais and Athens.

Then follows a discussion of Athena's enmity and identification with Medusa or the Gorgon and the association of the Gorgoneion or Gorgon face with burnt children's bones from Second Millennium Knossos. I then consider the relationships among Nēit, Athena and the ferocious Levantine goddess 'Anat. This leads not only to the Semitic tradition of the sacrifice of the first born—which is symbolically central to the three monotheist religions Judaism, Christianity and Islam—but also to consideration of whether or not there were human sacrifices to the three goddesses. The possibility that the legendary fiery self-sacrifice of the woman pharaoh Nitokris was a surrogate for Nēit is considered. Similarly, the question arises whether the legend of Dido's incineration stands for the burning of Tanit, 'Anat or Nēit's west Phoenician double. Were these legends used as etiological justifications for the actual "passing of children through the fire" in Canaanite-speaking cultures?

In a new section, I weigh the claims, made by Egyptian priests to Diodoros Sikeliotes, that Athens had originally been an Egyptian colony.

I conclude that these have some merit and that the names of three of the early figures in Athenian history—Kekrops, Erekhtheus and Petēs—have possible, or plausible, Egyptian etymologies. Leading from this discussion I speculate that there may have been a Middle Kingdom pre-Hyksos settlement in Attika.

While later construction has obliterated any possible archaeological trace of this settlement in Athens, in her sister city Troizen ancient and strangely “un-Greek” columns have been found. I use the word “sister” here not only because of the tight mythological connections between the two cities but also because the Egyptian etymology for its name is T3 Sn (the later Esna). T3 Sn was the major cult center of Nēit in Upper Egypt; Sais was the center in Lower Egypt. In Troizen, too, traditions hint at a pre-Hyksos foundation with strong Egyptian connections.

The following sections are concerned with Egyptian etymologies of some toponyms within Athens and other names, such as Parthenon and Gorgon, associated with the cult of Athena. There is also a discussion of Nēit as a divinity of the sky, her veil as clouds and Athena’s blue eyes as both resembling the sky and indicating her ferocity.

Finally, I discuss the Egyptian etymology of the name Athena for which there is no Indo-European alternative. In response to convincing criticisms I have changed my opinions on this derivation. Previously, I derived the name from Ḥt Nt “temple of Nēit” and the religious title of her cult center, the secular name of which was Sais. I have now shifted to deriving the name from Ḥt ntr (nt) Nt, which is also attested and for which Ḥt Nt may have sometimes been an abbreviation. I conclude by arguing that any problems remaining with the phonetics of the equation are overwhelmed by the semantic identification backed by the mass of parallels between the two goddesses and their cities as outlined in this chapter.

ARMOR AND EQUIPMENT

Herodotus wrote: “It is evident, I think, that the Greeks took the ‘aegis’ with which they adorn statues of Athena from the dress of Libyan women: the only difference being that the latter is of leather and has fringes of leather thongs instead of snakes.”⁵ “Aegis” in the sense of “storm cloud” will be discussed below. Here I merely want to consider it as a garment. It would seem to be depicted in the hieroglyph that was one form of the sign 𐩈 (Aa20). The other form had tassles.⁶ Gardiner listed the sign as

“unclassified” but both forms could be plausibly explained as a human covering with shoulder straps, either a dress or a corslet, neither of which has any known determinative. The distinction between armor and dress is not so great as it might appear. Although bronze plate armor was known in the eastern Mediterranean in the Late Bronze Age, most armor in the region was made of leather or bronze chain mail based on cloth or was simply thickly wadded linen. The association with tassels was maintained throughout Egyptian history. By the Eighteenth Dynasty, the hieroglyph that appears to have had the phonetic value *ʿpr* was used with the meaning “a type of tassel presented to a god.” In the Ptolemaic period *ḥ* in conjunction with a determinative for “cloth” meant “garment.”

The semantic range of *ʿpr*, however, was much wider. It had the general sense of “equip, outfit, make ready.” In the plural *ʿprw* it meant equipment—especially of a ship. It was extended to mean “crew.”

Confirmation that *ḥ* does signify “corslet” comes from an almost identical ideogram found on Linear B tablets at Knossos; it clearly has this meaning.⁷ Such correspondences between the two writing systems are extremely rare. One reason for this particular parallel could be that this type of armor arrived in the Aegean after the formation of the local script. Hence, the Egyptian sign was introduced with the object it represented. This possibility is made more likely by the similarities between the two signs for chariots that arrived in the eastern Mediterranean at about the same time as chain mail.⁸

The phonetic value of the Aegean sign for armor is unknown. The root *hopl-* found in *ὄπλον*, more often found in the plural form *ὄπλα* “heavy arms, armour, ship’s tackle,” and in *ὀπλίζω* “to make ready, equip” are attested in Hesiod and Homer but are absent from Linear B. This form would seem a likely candidate for the sound. Whether or not this is the case, it would seem plausible to derive *hopl-* from *ʿpr*. As has been discussed above, the vocalization of *ʿain* in both Egyptian and Semitic was usually with the back vowels /o/ and /u/.⁹ Thus it would seem legitimate to postulate tentatively a middle Egyptian **o/upl*. In this case the only phonetic problem would be with the initial *h-* in Greek. The ease and frequency of this alternation has been discussed in earlier chapters. The standard Indo-European etymologies can explain the initial *h-* but not the final consonant *-l*. According to these explanations, *hopla* is derived from one or other of two verbs, *ἔπω* and *ἔπομαι*. The first of these supposedly comes from a root **sep* attested in the Sanskrit *sapati* “worship, tend.” The second certainly derives from **sek^w*, which is seen in the

Latin *sequor* “follow, accompany.” In both cases neither the phonetic nor the semantic correspondences approach the accuracy of those of the Egyptian *ʿpr* with *hopla*.

The Palladion

Even stronger evidence for the two goddesses’ ancient identity comes from hoplolatry, the worship of armed shields. One of the oldest cultic symbols in Egyptian civilization is the sign of Nēit. This fetish stood on a pole. Originally, the figure seems to have been a species of beetle, *Agrypnus notodonta*. Soon, however, the beetle merged with the figure of an oval or hourglass shield with incurving sides across which lay crossed arrows. This representation remained the chief symbol of Nēit for the next three thousand years.¹⁰ Forms of the shield and arrows were found on stelae and memorials for the second pharaoh of the First Dynasty ḥ and a queen of his called Nt Ḥ tpw, as well as for another queen or princess Mr Nt.¹¹ Symbols of this type continued in the Old Kingdom. By the Saite period, however, the shape of the shield had changed to conform with military practice; it became a much broader straight-sided form with a curved top. With this modification, the shield represented Sais until Roman times.¹² Primarily, however, it was the symbol or fetish of the goddess herself.¹³

In 1906, Percy Newberry pointed out that the Egyptian sign was essentially the same as the Minoan figure-eight shield.¹⁴ The many representations of this extremely common Cretan sign make it clear that the shield was supposed to have been made from dappled oxhide, very much as the early Egyptian ones were. Although the symbol, which clearly had religious significance, occurred in earlier periods, Sir Arthur Evans, the excavator of Knossos, pointed out that “few representations of such shields can be found earlier than the closing phase of the Middle Minoan Period.”¹⁵

The beginning of the Middle Minoan III, circa 1730 BCE, is the date for which the Hyksos invasion is postulated by the Revised Ancient Model. From the same period or later comes an engraved amethyst seal showing a figure-8 shield surmounted by a helmet. It is uncertain, however, whether this engraving represents a person, a divinity or divine weapons.¹⁶ Later, but even more significant, is a painted limestone tablet from Mycenae; it shows a divinity, behind a figure-8 shield, being worshipped. The head is not preserved, but the white coloring of the limbs indicates, following the Egyptian convention, that the figure was female, i.e., a god-

dess. Martin Nilsson, H.L. Lorimer and other scholars did not hesitate to link the “shield goddess” to Athena and her symbol the Palladion.¹⁷ The appearance of this object is uncertain. Apollodoros described it: “three cubits in height, its feet were joined together; in its right hand it held a spear aloft and in the other a distaff and a spindle.”¹⁸ It is generally agreed to have been made of wood. Miss Lorimer, basing her opinion on a vase painting, wrote: “it may even have come down in unbroken descent from that of the figure-of-eight shield, as depicted on the LHIII limestone tablet from Mycenae; for to hang a shield on a log or tree trunk and even to give the latter a few human traits would not be beyond the powers of a proto-geometric worshipper.”¹⁹

Some traditions held that the Palladion fell from heaven into the temple of Athena at Troy before its roof was built. After the Trojan War, it was supposed to have been taken from there to Athens or, according to Latin authors, to Rome.²⁰ Despite some associations with Zeus, the Palladion, according to ancient and modern authorities, represented Pallas Athena. It was centrally important in her cult, particularly at Athens. As Nilsson put it, “Her effigy, the Palladion was in an inner palace as a pledge ensuring the survival of the city.”²¹ Sir Arthur Evans linked the sign of Nēit to the Palladion, through the Minoan Shields and the Mycenaean Shield Goddess. As far as I am aware, he has been the only scholar to do so. Nevertheless, each link in his chain of connections seems to have the support of the scholars concerned.²²

Beautiful young women in armor

The Egyptian toponym ‘Pr is difficult to place. Gauthier saw one instance as a sanctuary of Osiris near Memphis and another as purely mythical.²³ However, the late, fourth century BCE, *Lamentations of Isis and Nephthys* appears to use the name to refer to the city of Sais.²⁴ Herodotos used a derivative of *hopla* when he described the worship of Athena by a Libyan tribe:

They hold an annual festival in honour of Athene, at which the girls divide themselves into two groups and fight each other. Before setting them to fight, they pick out the best looking girl and dress her up publicly in a full suit of Greek armour [*panoplie*] and a Corinthian helmet, then they put her in a chariot and drive her around the lagoon. How they dressed these girls before there were

Greeks settled in the neighbourhood, I cannot say; presumably the armour they used was Egyptian—for I am prepared to maintain that both shields and helmets were introduced into Greece from Egypt.²⁵

Herodotos would seem to be right in deriving the title Aegis from *aix*, *aigos* “goat,” thus indicting leather protection.²⁶ On the other hand, *pr / hopla* and *panoplia* would all seem to refer to armor, plate, chain mail, and padded linen. A survival of this early form for religious purposes would explain the remarkable “linen corslet” [θώρακα λίνεον] sent to the Temple of Athena at Lindos on Rhodes by the pharaoh Amasis.²⁷

Amasis was the last major ruler of the Twenty-sixth or Saite Dynasty. During his long reign, 570–526 BCE, he embellished his capital Sais and the temple of Nēit in particular.²⁸ This pharaoh had close contact with Greeks as mercenaries and traders and concentrated them in a settlement at Naukratis near Sais. Furthermore, his promotion of his goddess was extended to Greece. He sent the linen corslet with two statues of Athena to her temple at Lindos, which was, after Athens, the goddess’s greatest cult center, supposedly founded by Danaos himself. In the middle of the sixth century Lindos was ruled by Kleobolos one of the “seven sages” of Greece and a friend of Solon. Like Solon, Kleobolos was supposed to have studied in Egypt.²⁹

Amasis’ religious activities in Greece were not restricted to the cult of Nēit / Athena. He sent statues of himself to the temple of Hera at Samos, but he did this, as Herodotos plausibly argued, because of his alliance and friendship with the Samian tyrant Polykrates. His two outstanding gifts seem to have been the linen corslet for Athena at Lindos and a gold-plated statue of Nēit/Athena presented to the Greek colony of Cyrene on the Libyan coast, the territory where Herodotos placed the center of her cult.³⁰

Another cult object offered by Amasis never reached its destination. A linen corslet sent to Sparta was captured by Samian pirates. Herodotos described it:

it was of linen, embroidered with gold thread and cotton, and had a number of figures of animals woven into the fabric. The most remarkable thing about it was that each fine thread of which the material was woven was made up of three hundred and sixty separate strands, all distinctly visible. Similar to it was the corslet which Amasis presented to the temple of Athena at Lindos.³¹

This type of work seems similar to the *polymitos* “multi threaded” gowns in which Aiskhylos dressed the Egyptian daughters of Danaos in *The Suppliants*.³² Homeric heroes like Ajax were supposed to have worn linen corslets.³³

Whatever their precise nature, there is very little doubt as to where Amasis’ presents were woven. Like Athena, Nēit was believed to have invented weaving.³⁴ Both Egyptian and Greek sources refer to the religious workshops attached to her temple at Sais where fine materials were woven for sacred use.³⁵ As the nineteenth-century classicist and Egyptologist D. Mallet pointed out, the woven clothes bore a strong resemblance to the *πέπλος* “cover, outfit or dress” presented to the image of Athena, which was woven over a period of nine months by aristocratic maidens under the supervision of a priestess.³⁶ According to Plato and other writers, the *peplos* was brightly colored and contained representations of mythical scenes, in particular that of Athena’s struggle with, and victory over, Asterios, otherwise known as the Minotaur.³⁷

The idea of offering Athena an embroidered dress, possibly with metallic threads, is clearly much older than the sixth century. Many fragmentary representations show women presenting colored cloth (at least once with a fringe) to a “priestess or epiphany of the goddess.”³⁸ In the *Iliad*, Hekabe, queen of Troy, presents Athena with a richly embroidered *peplos* which “shone like a star”; it was woven by Sidonian women. An aristocratic priestess placed it on the knees of her statue.³⁹ A seventh-century figure of a woman or female divinity whose dress had five panels of embroidered scenes, found at Francavilla in southern Italy, has been plausibly attributed to Athena.⁴⁰

As can be seen from the frieze on the Parthenon, the presentation of the *peplos* to the goddess was the central feature of the greatest Athenian festival, the Panatheneia. In classical times the form of the quadrennial festival was the result of reforms carried out in 566 BCE probably under the influence of Peisistratos. The degree of his responsibility for these reforms is debated but he did promote and use the cult of Athena and, to a lesser extent, that of Dionysos, whose Egyptian equivalent Osiris was also worshipped at Sais.⁴¹ Peisistratos and his son Hippias enlarged Athena’s temples and from the 540s the number of statues dedicated to her increased. This activity can be linked, with a fair degree of certainty, to Amasis’ wealth, prestige and promotion of the cult of Nēit/Athena.

Apart from their contemporaneity, two pieces of evidence point to a belief in the goddess’ Libyan origins. For the Greeks of this period Libya

referred to the territory now known as such but also to the whole continent of Africa. The tetradrachms issued by Peisistratos, the first to show a head of Athena, portrayed her in such a way that she could be taken as an African Black.⁴² It was this coin that inspired the title Black Athena.⁴³ Libyan influence can also be seen in Herodotos' description of one of the tactics the tyrant used to gain power:

In the village of Paeania there was a handsome woman called Phye, nearly six feet tall, whom they fitted out in a suit of armour [*panoplie*] and mounted in a chariot; then after getting her to pose in the most striking attitude, they drove into Athens, where messengers . . . were already . . . talking to the people and urging them to welcome Pisistratos back because the goddess Athene herself had shown him extraordinary honour and was bringing him home.⁴⁴

This street theater strikingly resembled Herodotos' description (given above) of the Libyan custom of dressing a beautiful girl in armor and setting her on a chariot to represent Athena. Thus, in this case too something of religious significance was apparently taking place. It is true that Herodotos reported the Libyan ritual a century later and by that time it seems to have contained Greek influence. Equally, however, there is no reason to doubt that the ritual was part of a much older tradition. Oric Bates demonstrated elaborately and conclusively the parallels between the Libyan "Athena" and Nēit.⁴⁵ Furthermore, the same word ὀλολυγή "chant" or "ululation" that Herodotos ascribed to Libyan women in her cult was made by the Trojan women praying to Athena in the *Iliad*.⁴⁶ While it could be argued the Libyan influence came to Athens from the Greek colony at Cyrene, we know that Athenians were not involved in the colonization so such influence seems unlikely.⁴⁷ Thus either the Libyans and Peisistratos shared an ancient tradition or the sixth-century Athenians learned about the cult of the Libyan Nēit through Sais or the treaty port of Naukratis, which Amasis granted to Greek traders.

Some scholars have maintained that the introduction of the first Attic coins portraying the "Black" Athena was connected to the reform of the Panatheneia. Whether or not they are right to claim that these coins were first struck to pay victors in the festival's competitions, there is no doubt that the two innovations were part of the general promotion of the cult of the Athena.⁴⁸ Equally, it seems overwhelmingly likely that Peisistratos' religious activities were influenced by the contemporaneous rituals of Amasis.

Cloth and cloud

Apart from her general associations with weaving, Nēit too was specifically connected to a *peplos*. Plutarch quoted the inscription beneath her statue in Sais according to which her *peplos* could never be lifted by a mortal.⁴⁹ Proklos, in his translation of the same inscription two centuries later, however, used the word *khitōn*.⁵⁰ Mallet accounted for this difference by the fact that a papyrus of the Saite period uses two synonyms when expressing the same idea. In the inscription the deceased asked Nēit to take off her *snḥw* “binding, garment” even though she had never removed her *qris* “garment.”⁵¹ The latter word is obscure but it seems to be related to *qri* “storm cloud.”⁵² This corresponds neatly with the meaning of “aegis”; both Zeus and Athena had an aegis and both signified “garment, storm cloud.” Aiskhylos and others used *aegis* in this sense and the verb *καταγίζω* means “to pour down rain.”⁵³ The double sense, or paronomasia, of *αἰγίς* apparently comes from the conflation of two etyma: the Indo-European *aix* “goat or buck” and the Egyptian *igb* “storm cloud” or as a verb “to be overcast.” Although the Egyptian word retained the final *-p* right down to the Coptic *khēpe*, final *-ps* were lost in loans into Greek and the semantic fit is perfect.⁵⁴ This links the garment or veil to Nēit’s function as a goddess of the upper sky and weather, which was part of her later cult at least. Diodoros identified Athena with the air and Diogenes of Babylon specified the ether or upper air.⁵⁵ The Neoplatonic philosopher Porphyry, of the third century CE, reported that, according to Orpheus, Korē [the maid] was represented as a weaver and the ancients said that the sky was a *peplos* and the “cloak for the heavenly gods.”⁵⁶

The association with clouds and weather leads to the possibility that both the late cult of the nautical Isis (whose cult absorbed that of Nēit) and her successor the sailing Virgin Mary derived from the Saitian cult of Nēit.⁵⁷ Such associations would fit well with the nautical treatment of the Athenian *peplos* in the Panatheneia. It was conveyed to the Acropolis on the model of a ship mounted on wheels with a crew of priests and priestesses wearing colorful clothes and garlands.⁵⁸ Transporting a cult object on a ship carried by bearers was a common feature of Egyptian religious ritual.⁵⁹ This combination of dress-armor and a ship and its tackle and crew also occurs in the semantic ranges of both *ʿpr* and *hopla* or the English words “equipment” and “outfit.” *Peplos* could derive from *p3 ʿpr “the ʿpr.” In this case, however, the conventional Indo-European

etymology from a reduplication of a root *pl “fold” appears equally likely.⁶⁰

If the Panatheneia of classical times showed Egyptian influence, how much, if any, of this came before the sixth century? There seems no reason to doubt the implication of two lines in the *Catalogue of Ships*, one of the oldest sections of the *Iliad*, that there was a major festival to Athena at Athens.⁶¹ Skeptics have claimed the lines were interpolated but they have failed to prove their case and the onus is on them to do so.⁶² It is also known that early statues of Athena were clothed. Thus, although there is no proof, an ancient ceremony was probably associated with her covering.⁶³

The antiquity of the Panathenaia would seem plausible, given the Athenians' reputation for religious traditionalism and the city's cultural continuity through the “Dark Age.” As superb politicians, Peisistratos and his friends would have been unlikely to introduce too many cultic innovations into such a conservative society. It must be admitted, however, that according to the Ancient Model they could have brought in new rituals from Egypt on the grounds stated by Plato in the *Timaeus* that in the Nile Valley ancient Athenian customs had been better preserved than in Greece itself.⁶⁴

In Hellenistic times there was no doubt that the Panatheneia was thought to be very old indeed. Its foundation was attributed to Athena and Hephaistos or to Theseus or to all three.⁶⁵ The association with the last is made more plausible by the festival's theme: Athena's struggle with, and victory over, the Titan or giant Asterios. Mythographers link Asterios to Crete and the Minotaur. Thus, as J. A. Davison has suggested, the “political” theme may well have been Theseus' achievement of Athenian independence from Crete.⁶⁶

Indeed, as has been argued above, the impulse for the reforms of the Panatheneia and other aspects of the cult of Athena could have possibly come from the prestige of Nēit's city Sais and her promotion by Amasis. Thus, Egyptian elements could have been introduced at this time. Nevertheless, it would seem wiser to accept conventional wisdom and assume that the major changes in the sixth century were the introduction of athletic and musical competitions. In this interpretation, the Athenians seem to have followed the pattern of the Olympic and the recently established Pythian, Isthmaian and Nemean games. Furthermore, possibly as a result of the influence of these games, the Panatheneia may have been turned from an annual festival to a quadrennial one. Georgio de Santillana has suggested, however, that the Olympic quadrennial sys-

tem may have come from the Egyptian calendar's *tetraeteris*.⁶⁷ We know that in the seventh century citizens of Elis consulted Pharaoh Psametikhos on the proper management of the Olympic Games.⁶⁸ In any event, such an interpretation would leave as the ancient features precisely those elements that were most Egyptian: the *peplos*, its conveyance by "ship," and the all night festival with its lights and "fire dancing" in armor (discussed below). All of these could well date to Mycenaean times. In conjunction with the padded armor, these ancient features seem to provide a link between Nēit and Athena that can most plausibly be seen as originating in the Bronze Age.

Fire festival

Another element of the Panatheneia is similar to the cult of Nēit at Sais as described by Herodotos:

At Sais, on the night of sacrifices, everybody burns a great number of lights in the open air around the houses; the lamps they use are flat dishes filled with oil and salt, with a floating wick which keep burning throughout the night. The festival is called the Festival of Lamps (λυχνοκαίη) and even the Egyptians who cannot attend it mark the night of sacrifice by lighting lamps, so that on that night lamps are burning not in Sais only but throughout the country.⁶⁹

Although there was more than one festival of this type and their dates seem to have varied, texts in Egyptian and Greek translation confirm the nature of this nocturnal celebration.⁷⁰ Alan Lloyd in his commentary on this book of Herodotos identified the flat dish lamp as Gardiner's sign 𓆎 (R7). The issue is clearly very complicated, as the sign does not represent a dish and Gardiner himself saw it as an incense bowl with smoke rising from it.⁷¹

Despite the similarity to the Indo-European root *leuk "light," the Greek word *lykhnos* "torch, lamp" was at least "contaminated" by the Egyptian *rqh* "light, festival of burning." This word was later written *rkh*, *ṛkh* or *tōkh* in Coptic, at least it was when the Greek word was used to describe the Saitian festivals.⁷²

Alan Lloyd writes that the Greek period terracotta statuettes found in Egypt representing Athena/Nēit and holding a torch were "quite un-Gk."⁷³ Many Greek rituals associated with Athena, however, involved torches used at night. The Panatheneia seems to have begun with an

all-night festival in which runners carrying torches raced to light the flame on the goddess' altar.⁷⁴ Similar torch-lit races were held in Athena's honor at Marathon and Corinth. At Eleusis and elsewhere, lamps were lit in all-night vigils.⁷⁵ There were also the Πυρρίχισταί: "fire-dancing men who, as can be seen in a relief from the Akropolis, danced in hoplite armor."⁷⁶ Thus, these festivals emphasize once again that armor was a pervasive element in the cults of both Nēit and Athena. Their dance seems to have been a celebration of Athena's defeat of the Titan Asterios. Plato also mentioned that this theme was woven into the *Peplos*.⁷⁷

ATHENA AND HER VICTIMS

Asterios not only had connections with Crete but was also clearly divine, being linked to Zeus and identified with the Minotaur. He was possibly connected to 'Astar, the Semitic god of Venus as the Morning Star. 'Astar's better known female double 'Astarte, the goddess of love and beauty, seems to have been the divinity of the evening star.⁷⁸ This ambiguity might explain the alternative Greek tradition that Athena's victim was the "queen" Medusa or Gorgon, hence her epithet Gorgophona "Gorgon slayer." Like her favorite Perseus, Athena used the Gorgon's head as a weapon and incorporated its fearsome power. Her use of the monster's face on her armor can be dated back to Homer and far beyond.⁷⁹

Despite the fact that many nineteenth-century classicists passionately denied any fundamental relationship between pure, "rational" Athena and the savage Gorgon, they, in fact, share many similarities.⁸⁰ Thereby, the confusion is compounded. Like the goddess, Medusa was a queen of Libya. Athena's doublet Pallas also was queen of Libya and was supposed to have been killed by Athena, who then, according to some traditions, took from Pallas the symbol of the Palladion.⁸¹

Children's bones

A 1978 discovery provides another link between Athena and the Shield Goddess. In a room outside the palace of Knossos pots containing children's bones were found. The dating is not altogether clear; Peter Warren saw the pots as dating to the ceramic period Middle Minoan III, 1730–1675 BCE.⁸² C. Lambrou-Phillipson, however, places them in the Late Minoan, after 1675 BCE.⁸³ The children's bones were scared by

knife marks, marks associated with a cooking pot. These have led the excavator Peter Warren to propose that child sacrifice and cannibalism had taken place there. The discovery of a white steatite scarab of the Second Intermediate period in the same room provides a loose connection with Egypt.⁸⁴ No religious images were found near the bones but a miniature amphora with cultic associations and decorated with figure-8 shields was discovered. Still more remarkable is a unique pot decorated with three motifs: A Gorgoneion or Gorgon's face has what appears to be a tuft of hair at the top. Second, the same shape appears without a face; possibly it portrays the back of the head. Third is the figure-8 shield.⁸⁵ This pot illustrates a Bronze Age identification of Athena with Medusa and overthrows the separation between the two maintained by nineteenth- and twentieth-century scholars who wanted to keep Athena "pure and rational."⁸⁶ Evidence from Canaanite culture would seem to suggest that the tufts were to be used to hold and attach the head.⁸⁷ According to Pausanias, however, at Tegea in Arkadia a lock of the Gorgon's hair was used to protect the city. In his discussion of this passage Frazer uses analogies to indicate that exposure of a lock of hair was thought to bring on thunderstorms and, thus, leads back to the aegis as a thunder cloud.⁸⁸

The discovery at Knossos confirms that—as with many Greek gods, notably Artemis, Poseidon and Dionysos—Athena was associated with human, and especially child, sacrifice, and that the practice continued in the Iron Age.⁸⁹ A Hellenistic story tells of girls throwing themselves off the Akropolis in suspiciously ritual circumstances. According to Tzetzes, writing in the twelfth century CE, Lokrian girls were sent to the Trojan shore to atone for the desecration of Athena's temple in Troy; there they were murdered and their bones burnt in a special way, indicating a sacrifice.⁹⁰ The origin of the festival of Hellotia was explained in terms of a legend in which a maiden was burnt to death in the temple of Athena at Corinth.⁹¹ Clear evidence of human sacrifice to Athena can be found at Salamis in Cyprus. Most authorities believe the sacrifices to have been derived from a Mycenaean cult.⁹²

ʿAnat

Another possibility is that the Cypriot cult was linked to that of Athena's Canaanite counterpart, ʿAnat, who must have been the "Athena," the goddess to whom a virgin was sacrificed every year. ʿAnat was the extraordinarily bloodthirsty warrior goddess of the West Semites. Her name

has been found in Amorite as well as in texts from Mari, dating back to the beginning of the Second Millennium.⁹³ She is not, however, present in either the Mesopotamia or the Eblaite panthea.⁹⁴ Much ingenuity has been spent in trying, with very little success, to find an etymology from the semitic roots *ʾyn* “spring,” *ʾny* “submit,” *ʾnh* “answer” and *ʾnm* “cloud” as well as from a hypothetical **nt* “omen, time.”⁹⁵ It would seem more plausible, given her relatively late arrival and the regions where she was worshipped, to derive the name from *Nt*. Phonetically, there is a difficulty with the initial *ʾayin* in *ʾAnat*. Many examples of *ʾain* softening to *>aleph* occur in Semitic languages, although the reverse is less frequent. A prothetic *>aleph*, often unrecorded in the script, was quite common in Egyptian.⁹⁶ Furthermore, if we can accept the latest research on the subject—which derives the name of *ʾAnat*’s West Phoenician equivalent, *TNT*, from *ʾAnat*—the *ʾayin* has disappeared or was never there.⁹⁷ The equivalence with *Nēit* is strengthened by the possibility that the second /i/ found in the late vocalized forms *Tinnit*, or *Tannit*, was not a secondary development but original.⁹⁸ Against this, however, must be set Gordon’s conviction that the pronunciation of the Levantine title was *ʾAnat(i)*, though a metathesis **Anait* would be possible here.⁹⁹

The possibility that the name *ʾAnat* derived from *Nēit* is not weakened by the fact that the Semitic goddess was worshipped in Egypt as *ʾn-ta* or *ʾA-na-ta*. There is no reason why she should not have been reintroduced into Egypt especially as her cult is always associated with Semitic speakers. The first attestation of the name is in the Hyksos period, when important Hyksos leader was called *ʾAnat Ḥr*.¹⁰⁰ The next appearance of the cult of *ʾn-ta* appeared in the Nineteenth Dynasty, which in some respects consciously based itself on Hyksos traditions.¹⁰¹ At an even later period, it is striking that when “Jews” were placed in Elephantine during the Twenty-sixth or Saite Dynasty, the colonists called their goddess *ʾAnat*. The city’s official cult was of *Nēit*.

Whether or not the two names are related there are many striking parallels between the two deities. They combined being mighty and cruel warriors with a tender loving quality. They were both endowed with renewable virginity. Both were associated with bows and hunting and, like *Nēit* and her vulture, *ʾAnat* was identified with a bird of prey, the eagle. Furthermore, both goddesses have celestial aspects.¹⁰²

Given the links between *Nēit* and Athena mentioned above, one would expect to find parallels between the latter and *ʾAnat*. Interestingly, however, Theodore Gaster prefers to see similarities between the Levantine

goddess and Artemis.¹⁰³ As F. O. Hvidberg-Hansen has demonstrated, Athena shared many of 'Anat's characteristics. Others, however, such as the Levantine goddess' association with mountains and the *sparagmos* (the ritual tearing apart and eating of a young male victim), are not.¹⁰⁴ Furthermore, as Hvidberg-Hansen has pointed out, there are joint dedications to 'Anat's and her West Phoenician double Tanit and to Artemis.¹⁰⁵ Such evidence does not, however, preclude the identification of 'Anat with Athena. There is no reason why the Greek goddesses, who resembled each other in many ways, should not both have been associated with 'Anat. In fact, while there is no attestation of a direct parallel between 'Anat and Artemis, there are some between the Semitic goddess and Athena. Philo of Byblos writing in the first century CE but using much earlier sources, including some from the Bronze Age, identified the two.¹⁰⁶ In Corinth a late source identifies as Phoenician the Athena with whom a sacrifice is associated.¹⁰⁷ In the Cypriot cults at Lapithos and Idalion, the local goddess was worshipped as 'Anat in Phoenician and Athena in Greek.¹⁰⁸ Thus in First Millennium Cyprus, which in so many ways preserved Aegean Bronze Age culture, the two goddesses were clearly identified. This attestation would seem to indicate a much older historical stratum than those connecting Tanit and Artemis.

The three-way correspondence Nēit-Athena-'Anat might be able to cast some light on the gruesome finds at Knossos. Although there is no direct parallel between Athena and 'Anat, the latter's joint struggle with her brother god Ba'al against an aquatic monster strongly suggests an indirect parallel. Fontenrose pointed out the similarities between Athena's partnership with Perseus and that between 'Anat and Ba'al. The Greek pair fight a sea monster off the coast of present-day Palestine, but they are also involved in the struggle with, and slaughter of, the Libyan Gorgon Medusa. Fontenrose also showed how in different Canaanite legends 'Anat appears on both sides of the struggle.¹⁰⁹

As mentioned above, the Gorgon can be seen both as Athena's victim and as her double whose head or skinned face the goddess put on her armor to gain its fearful power. Although the tradition that she flayed her victim was strong in classical times, the portrayal of what appear to be the backs of heads on the gorgoneion *pithos* suggests that, in this case at least, the goddess was seen as suspending whole heads.¹¹⁰ Also, it is possible that at an early stage of the Greek legend more than one head was involved. Tradition referred to three hideous gorgons, although only one was supposed to have been beheaded. There is also a curious couplet

of dubious authenticity in Hesiod's "The Shield of Herakles." It concerns Perseus' outfit and Frazer translated it:

But all his back had on the head of a dread monster,
The Gorgon, and around him ran the *Kibisis*.¹¹¹

Κιβίσις is usually translated "pouch" or "wallet" but it is only used in connection with this legend of Perseus. Lewy's derivation of it from the Canaanite *qibūš* "collection, assemblage" (known from modern Israel) with the meaning of "chaplet, string of heads" would explain its qualities of surrounding and enveloping. Whether or not this is the case, the design on the *piṭhos* parallels these Ugaritic verses:

But Anath gives battle
Mightily she cuts in pieces the sons of two cities
Beneath her are heads like balls,
Over her are palms of hands like locusts . . .
She hangs heads on her back,
She fastens hands on her girdle.¹¹²

This, as many scholars have noted, is one of the most striking resemblances between 'Anat and the Hindu goddess Kali. This relationship seems as likely as its nature is obscure.¹¹³ The parallel between 'Anat and Athena might also throw some light on one of the latter's victims—Asterios. In the Ugaritic epic of *Ba'al and 'Anat*, 'Attar the terrible is supposed to have usurped the throne of Ba'al after the latter was killed by Mot "Death." 'Attar is then supposed to have retired to rule earth because of his inadequacy.¹¹⁴ His enmity to Ba'al is unquestionable and, while there is no specific reference to his having been killed by 'Anat, this was the general fate of Ba'al's enemies.

Lucifer 'Astarte

William Albright described the conflict between Ba'al and his usurper, the morning star, and plausibly linked it to what he saw as a Canaanite myth quoted in the *Book of Isaiah*.

How hast thou fallen from heaven,
Helel alone of Shahar [dawn].

Thou didst say in My heart,
 I will ascend to heaven,
 Above the circumpolar stars
 (kokabê El)¹¹⁵

This, of course, can be linked to the legends of Satan, whose biname is Lucifer (lightbearer) or Morning Star, as the usurping and fallen angel.¹¹⁶ The most elaborate exposition of these legends came in the *Book of Enoch*, which, although written in the last two centuries BCE, clearly contains very old elements. In passages from this book, the fallen watchers, angels or stars copulate with cows and are themselves generally associated with oxen.¹¹⁷

The association of sex, beauty, cattle and the stars is clearly both ancient and fundamental in Near Eastern mythology. In Egypt the goddess Hathor combined all these elements. Albright has even attempted to link her name to 'Attar and 'Astarte.¹¹⁸ The same cluster, with the more sinister connotations found in Canaanite culture, appears in legends attested in Third Millennium Mesopotamia. According to this legend cluster, the beautiful but deadly goddess Istar, whose planet was Venus, was rebuffed by the hero Gilgamesh, because she had killed and eaten her previous lovers. In her anger she persuaded her divine parents to create a monstrous heavenly bull which Gilgamesh and his companion Enkidu fought and killed.¹¹⁹ The Greek myths tell of Pasiphai, "shining for all," copulating with a bull and giving birth to the Minotaur-Asterios. This stellar bull and his Egyptian origins from the bull-headed god Mont will be discussed later. The myth of the Minotaur fought and killed by Theseus and Ariadne, or Athena, clearly belongs to this cluster. The idea that the female monster was in some way Istar, goddess of beauty, would explain the paradoxical descriptions of the loveliness of the Gorgon given by both Pindar and Pausanias.¹²⁰ In general, however, she was considered to be fiendishly ugly.

'Attar's Ugaritic epithet "the terrible" could well refer to his appearance. It may relate to his counterpart Istar-'Astarte's proclivities. It may also refer to his cult. If the description by Pseudo-Nilos of a fourth century CE Arab rite is genuine, it is likely that *sparagmos*—the tearing apart and eating of a perfect young man—was a very ancient practice. The sacrifice was dedicated to the Morning Star, 'Attar to the south Arabs but the goddess Istar/'Astarte to other Semitic speakers. These identifications link the cult to the goddess's habits to which Gilgamesh objected.¹²¹

In Greek legends the cult of the Minotaur (Asterios) also involved sacrifice of perfect youth, the seven youths and seven maidens sent to Crete from Athens.¹²² Thus there was no doubt about the terrible nature of Athena's transsexual victim/double, Asterios/Gorgon

Relating 'Anat to the Shield Goddess provides insight into the child sacrifice at Knossos. It must be insisted, however, that this ritual does not appear to have been *sparagmos*, although 'Anat was clearly involved. As a chilling Ugaritic verse, quoted earlier, puts it:

She ate his flesh, without a knife,
She drank his blood without a cup.¹²³

In Peter Warren's find, although there are some signs of cannibalism and it is possible that the flesh was not burnt, the bones had certainly been cut. Thus it may be that, despite Pseudo-Nilus' report, *sparagmos* was only an ideal and cutting was, in fact, necessary. On the other hand, the clear association with fire raises the possibility that another type of sacrifice may have been at least partially involved. The killing of children with knives and the burning of their bodies on a sacred fire seems to have been an important, if not the most important, sacrifice for Canaanite speakers. In Carthage and other sites in the western Mediterranean, abundant archaeological evidence shows that this rite was practiced frequently. Archaeological evidence indicates that this form of child sacrifice increased over the centuries at Carthage.

Two plausible reasons can be offered for this increase. The first is common to many societies: sacrifice increases when a society sees itself as threatened. In the case of Carthage ancient authors attest to this.¹²⁴ The second reason is less certain, but apparently the sacrifice increased with the rise of democracy or citizen participation. Nevertheless, as in nearly all other respects, notably language, western Phoenicia preserved ancient cultural features lost in the east. So we have no reason to doubt that the ritual was carried out in the Levant, too, at an earlier date. As the name of the sacrifice *MLK*, the same root as that for *malk* "king" suggests, the sacrifice tended to be reserved for royalty and other leaders who showed their commitment to the community through the ritual.¹²⁵ As Philo of Byblos wrote in the second century CE: "It was the custom among the ancients, when great dangers befell [them], that to avoid complete destruction, the rulers of the city or the people, should give over to slaughter the most beloved of their children as a ransom to the vengeful daimons. And those given over were slain with mystic rites."¹²⁶

At the beginning of the twentieth century, R.A.S Macalister discovered a *tophet*, that is a cemetery of jars containing the bones of infants; it was next to a sacred "High Place" at Gezer in Palestine. Many scholars have criticized this find. No doubt Macalister made some major stratigraphical errors. On the other hand, given the undoubted embarrassment such a discovery brings to the origins of Judaism and Christianity, it is not surprising that scholars committed to these faiths, who dominate "biblical" archaeology, should be reluctant to accept his findings.¹²⁷

Even without any archaeological evidence from the Levant, the case that this type of sacrifice took place there is overwhelming. In addition to the finds in western Phoenicia, reports from Ugaritic, as well as classical sources and above all biblical texts make it abundantly clear that sacrifice of the first born, in emergencies, was practiced at the very least in Israel, Moab and Phoenicia.

Sacrifice of the first born

Thus, it is likely that at some stage, all Canaanite speakers practiced child sacrifice. At a symbolic level it survives in the centrality of sacrifice or the *yâhîd*, or in Greek *monogénos*, "only begotten son/child," notably Isaac, Jesus and Ishmael in the three great monotheist religions that derive from this tradition.¹²⁸ Another distinctive feature of the rite's symbolism was the substitution of a sheep for the sacrificial child: the ram caught in a thicket, the Lamb of God and the sheep and goats sacrificed at Arafat during the Haj to celebrate Abraham's offering his son there. This substitution is also found in the legend of the Golden Fleece; Zeus sends the ram to replace Phrixos the son that King Athamas was about to sacrifice.¹²⁹ Archaeologically, the bones of sheep have been found mixed with those of children in the *tophet* of Carthage. Much later stelae from N'gaus in Algeria specify that a lamb was sacrificed instead of a child.¹³⁰ It is interesting, therefore, to find sheep bones with the human remains at Knossos.¹³¹

To whom were the Canaanite child sacrifices dedicated? The documentary evidence points to a number of male gods of states or cities: Yahweh, Khemosh, Melqart and El. The only direct evidence of this kind of child sacrifice to a goddess in the Levant is a reference to one for "Athena" at Laodicea in Syria.¹³² Nevertheless a powerful case can be made that during the Second Millennium the children were offered to

ʿAnat. First is the evidence of ʿAnat's extraordinarily sanguinary nature. René Dussaud and other scholars have linked this nature to west Phoenician child sacrifices to Tanit.¹³³ Stelae associated with children's bones at Carthage are dedicated to "Tanit face of Baal." Given the known conservatism of west Phoenicia and the identification of Tanit with ʿAnat, which F. O. Hvidberg-Hansen has brought to near certainty, it is extremely likely that some early Canaanite child sacrifices were dedicated to ʿAnat either alone or in association with a male god.¹³⁴ The evidence from pre-Hellenic possibly west Semitic-speaking, Knossos fits well here.

If child sacrifices were dedicated to Athena and ʿAnat, is there any evidence to connect Nēit to this practice? There is some, although it is only indirect. While it is often difficult to draw a line between secular and religious killing, human sacrifice was practiced relatively frequently in Egypt; foreigners were usually the victims.¹³⁵ The practice has not, however, been attested specifically in connection with Nēit. On the other hand, we know that the goddess was worshipped in nocturnal mysteries that frequently took place in hidden or subterranean chambers.¹³⁶ More significant are the stories concerning Queen Nitokris. This legendary figure appears to have been based on the historic queen, Nt iqr̥ti, who took power at the end of the Sixth Dynasty. Her name, like that of many other royal ladies in the Archaic period and the Old Kingdom, contained the element "Nt." Interest in Nt iqr̥ti appears to have risen during the Saite at the same time as that in Nēit, two thousand years after the original queen's death. Pharaoh Psammatikhos I named his daughter Nitokris and she went on to become a central figure in Egyptian politics in the seventh century.¹³⁷ According to later historians, the first Nitoqerti was supposed to have been beautiful but with fair hair and complexion. Egyptians associated this coloring with Libyans and, hence, Nēit. It was also associated with the so-called "Typhonians" or "People of Seth," who seem to have been regularly sacrificed in Egyptian ritual.¹³⁸ An even more suggestive source of information comes from Herodotos:

The story was that she [Nitokris] ensnared to their deaths hundreds of Egyptians in revenge for the king her brother, whom his subjects had murdered and forced her to succeed; this she did by constructing an immense underground chamber in which, under the pretence of opening it by an inaugural ceremony, she invited to a banquet all the Egyptians whom she knew to be chiefly responsible for her brother's death; then, when the banquet was in

full swing, she let the river in on them through a large concealed conduit-pipe. The only other thing I was told about her was that after this fearful revenge she flung herself into room full of ashes to escape her punishment.¹³⁹

This hydraulic engineering feat is very similar to that of the legendary queen of Babylon, also recounted by Herodotos. Her name was also Nitokris but no trace can be found of her in Mesopotamian annals.¹⁴⁰ The passages on revenge for her brother's death resemble legends of 'Anat's vengeance on the killers of her brother Ba 'al. One of the most vivid episodes also took place in a banquet hall.¹⁴¹ This would seem significant given the identification of 'Anat and Nēit made above.

Elissa and Dido

Nitokris' own fate is even more interesting. It resembles that of Dido, another historical queen around whom many myths and legends accumulated. According to later historians, Dido, "Beloved" or Elissa to use her historical name, was the sister of King Pygmalion. Toward the end of the ninth century, Pygmalion ordered the murder of her husband, a priest of Melqart, the god of the city. Elissa/Dido then fled west with a band of aristocratic followers, among whom was a priest of Juno ('Anat/Tanit) first to Cyprus and then to North Africa. There she founded Carthage, Qart ḥadast "new town."¹⁴² Dido's fiery suicide was vividly described by the Latin poets Virgil and Silius Italicus, both of whom attached her fate to the betrayal by the Trojan hero Aeneas, who left her to found the city that led to Rome.¹⁴³ The story in this form is, of course, anachronistic since the fall of Troy took place four hundred years before the foundation of Carthage in 814 BCE. Other forms of the tale are earlier. Timaeus of Taormina, writing in the third century BCE, referred to Dido's having thrown herself onto a funeral pyre to avoid marrying a Libyan king.¹⁴⁴ In the first century CE the Roman historian Pompeius Trogus embellished the story saying (as Virgil had) that Dido had first stabbed herself with a sword and then burnt herself to avoid dishonor.¹⁴⁵

In late antiquity it was believed that Elissa or Dido had become divine and had been worshipped in Carthage as a goddess.¹⁴⁶ At the same time, however, she was closely associated with Juno Caelestis (Juno of the heavens) who is generally recognized as the Roman counterpart of Tanit.¹⁴⁷ This association has led scholars, at least since Movers in the

mid-nineteenth century, to identify the two and see a connection between Dido's funeral pyre and the use of fire in the cult of Tanit. Since the discovery of the *tophet* at Carthage, the queen's legendary self-sacrifice has been seen by some scholars as a mythical etiology of, or justification for, immolating children.¹⁴⁸ Analogy suggests that the legends surrounding Nitokris might have served the same etiological function for similar practices in the cult of Nēit.

It should be noted that the Egyptian queen had the physical characteristics of a sacrificial victim. Nēit and Tanit may also be connected by a symbol associated with the latter: the so-called "caduceus" found frequently at Carthage. This symbol can be interpreted as a figure-8 shield with an open top or a pole planted in the ground. From the shield strings or bands hang down. This symbol of the Libyan Tanit, which does not occur in eastern Phoenicia, would, therefore, seem similar to the Lybio-Egyptian sign (Palladion) of Nēit discussed above.¹⁴⁹

To return to the find at Knossos, two pieces of evidence point to an association with Nēit. First, in the room of the children's bones are large numbers of loom weights apparently coming from an upper room in the same building.¹⁵⁰ This equipment would suggest religious textile manufacture as reported in the temple precinct at Sais or in the weaving of the Peplos at Athens. Loom weights, however, have been discovered elsewhere in religious sites at Knossos with no iconographic association with the Shield Goddess.¹⁵¹ On the other hand, in seventh century Jerusalem there were long established: "houses of the male prostitutes attached to the house of the Lord, where the women wove vestments in honour of Ašerah."¹⁵² The name Ašerah seems to be associated with the Canaanite goddess ʾAṯirat. It also appears in the unique phrase "his ʾAšerah" next to Yahveh with a painting of the two as cow demons on a wall found at Kuntilet Ajrud in the Negev.¹⁵³

On the other hand, it may well be that by the First Millennium ʾAšerah was simply a word for "goddess" in general and that Yahveh's consort was specifically seen as ʾAnat. ʾAnat was worshipped at the important Yahvist cult center at Bethel. The "Jews" who settled at Elephantine, or the southern frontier of Egypt in the seventh century BCE, built temples for Yahveh and ʾAnat, although, as mentioned above, these temples may have been influenced by the reigning Saite Dynasty with its cult of Nēit. Jeremiah denounced the worship of the "queen of heaven" among the exile community in Egypt; scholars generally agree that this "queen" was ʾAnat. A number of Aramaic texts from fifth-century Egypt refer-

ring to “‘Anat” or “Ba‘al husband of ‘Anat” could well be seen as Jewish.¹⁵⁴ Thus, the weaving at the temple in Jerusalem might well have been of covers for, or symbols of, ‘Anat.

In general, therefore, the loom weights indicate an association of Athena with Nēit and ‘Anat. A second connection between the finds at Knossos and Egypt is the presence in the Knossos room of children’s bones and of a scarab of the Second Intermediate period, of a type associated with the Hyksos in Sinai and the east Delta.¹⁵⁵

Although the new finds do not conclusively confirm the identification of Nēit with Athena, they do strengthen the links between the latter and the Shield Goddess. They also strongly suggest parallels between the Aegean goddess and ‘Anat/Tanit. Thus, the connection through the sequence—sign of Nēit, Shield Goddess, Palladion of Athena—is associated with many other parallels: the defeat of Asterios; the making of a ritual cloth, armor or dress; the cult of fire at night; and child sacrifice. Together these seem to establish links among these goddesses dating back to the Bronze Age.

The two goddesses

This is the context for thinking about the beliefs held by Greeks of the classical and Hellenistic periods that Nēit and Athena were the same. The sixth-century numismatic portrait of Athena as possibly “black” has been referred to above. In the following two centuries, Herodotos and Plato were convinced of the identity of the two goddesses. As the latter put it: “The chief city in this district is Sais—the home of King Amasis—the founder of which, they say, is a goddess whose Egyptian name is Nēith and in Greek as they assert Athena.”¹⁵⁶

All subsequent writers until Plutarch followed this assertion. By the time of Plutarch the Saitian divinity had become assimilated to Isis, although Plutarch still referred to her as Athena.¹⁵⁷ In Roman times Athena was represented on the Athenian Akropolis seated on a crocodile to show that she came from Egypt.¹⁵⁸ This symbolism must have come from Nēit’s being worshipped as the mother of the crocodile god Sebek and the fact that in Egypt she was sometimes portrayed as accompanied by or breast-feeding two crocodiles.¹⁵⁹

Conventional wisdom, today, maintains such associations of Nēit with Athena were merely the result of Egyptomaniac fantasy and should be dismissed as absurd. According to most modern scholars the mistaken

correspondence between the two was simply based on a number of coincidences. Both were goddesses of war with renewable virginity. They were patronesses of weaving and each was symbolized by a bird of prey, a vulture or an owl. Given the ancient associations suggested above and the consistency of the classical tradition, these parallels cannot be shrugged off so easily. Furthermore, the attacks on the identification of these two have to be seen in the light of the general ideological disinclination among nineteenth- and twentieth-century scholars to see any genuine connections between Egyptian and Greek religion. Thus, all in all, the case against a fundamental identity of the two goddesses is extremely implausible.

ATHENS AS A COLONY FROM SAIS?

In addition to the connection between the two goddesses, Athena and Athens the city were specifically linked to the city of Sais. Pausanias mentioned the sanctuary of Athena Saitis near Lerna and the legendary site of Danaos' landings on the Peloponnese. In the passage on the temple at Thebes of Athena Onka (discussed in Volume 2), Pausanias wrote "this Athena . . . is called by the Phoenician name of Onga not by the Egyptian name of Sais."¹⁶⁰ As stated above, none of Plato's commentators or other later writers denied a genetic relationship between Sais and Athens. The only dispute was over precedence. Some followed Plato in claiming Greek priority but others maintained that Athens was a colony of Sais, a belief that survived into the nineteenth century.¹⁶¹

Despite their civic and Hellenic pride and their contempt for contemporary Egyptians, Athenians certainly felt a religious affinity for Egypt as a whole and Sais in particular. As one modern scholar has summarized the position, "The Athenians were well known for the belief that their own religious beliefs were the same as those of the Egyptians."¹⁶²

Naturally, Egyptians saw Athens as the daughter city of Sais. Diodoros Sikeliotes, writing in the first century BCE summarized their arguments: "the Athenians they say are colonists from Sais in Egypt, and they undertake proofs of such a relationship; for the Athenians are the only Greeks who call their city *asty*, a name brought over from the city Asty in Egypt."¹⁶³ Anne Burton in her commentary on this book of Diodoros is not impressed. She points out that by classical times, what she refers to as *ist* "seat, place" lost its final -t, unless preserved by a following vowel as in the temple of Isty near Thebes.¹⁶⁴ Although early Egyptologists transcribed the word as *ist* or *ast*, it is now generally written *st*. There is,

however, no reason to doubt that at some stages the word had a prothetic i-, a- or e-. *St* is a very common Egyptian noun and place-name element.¹⁶⁵ It is possible that *st* was introduced from Egyptian before the dropping of final -t s. In any event, as Anne Burton has pointed out, the final vowel would have protected the form from this process in either Egyptian or Greek. Introducing the word in the Second Millennium would allow for the obvious connection between the Athenians' name for their city and the word *asty*. *Asty* in Greek means "city" in the same sense as the Egyptian *St*: as the place rather than the community or *polis*. *Asty*, which has a very dubious Indo-European etymology, clearly existed in Greek long before classical times; it is well attested in Homer.¹⁶⁶

The second point made to Diodoros by the Egyptians was that the Athenian:

body politic had the same classification and division of the people as is found in Egypt, where the citizens have been divided into three orders: the first Athenian class consisted of the "eupatrids," as they were called, being those who were such as had received the best education and were held worthy of the highest honour, as is the case with the priests in Egypt; the second was that of the "geomoroi," who were expected to possess arms and to serve in defence of the state, like those in Egypt who are known as husbandmen and supply the warriors; the last class was reckoned to be that of the "demiurgoi," who practice the mechanical arts and render only the most menial services to the state, this class among the Egyptians having a similar function.¹⁶⁷

Burton's objection to this is even more explicitly based upon the Aryan Model and on the inconceivability of Bronze Age contacts. She argues that the Athenian three-caste system must be very old since Aristotle referred to its existence by 580 BCE. Plutarch even attributed the social division to Theseus. Hence, she holds, it was necessarily native and not Egyptian.¹⁶⁸

From the point of view of the Ancient Model, the antiquity of the Athenian system actually strengthens the case for Egyptian influence. Attika was never conquered by the Heraklids and it was widely believed in classical antiquity to have preserved ancient institutions lost elsewhere. Therefore, the establishment of a social hierarchy by Egyptian or Aegypto-Greek founding heroes in the Bronze Age would seem quite

plausible. It should be remembered that the name Theseus has no Indo-European etymology but can plausibly be derived from the Egyptian *Ṭsw* “commander, protector of the poor” still preserved in the Coptic *joeis* “lord, Jesus.”¹⁶⁹

The third “proof” given to Diodoros by the Egyptians was that founders of Athens such as Πέτης, Κέκροψ and Ἐρεχθεύς were Egyptian or double natured, that is to say, Greek and barbarian. Burton points out that Pētēs is the same as the Athenian leader Πετεώς found in the *Iliad*. She believes that the name “may well be of Egyptian origin,” indicating that the Egyptian name P3 di is attested in Greek as Pētēs.¹⁷⁰

Possible Egyptian etymologies for Kekrops will be discussed below.

The lexicographers list Erekhtheus under Ἐριχθόνιος; ἔρι- being a prefix of uncertain value but generally thought to be intensifying and -χθόνιος “of the earth” referring to the hero’s supposed autochthony. This indeed was the predominant Greek tradition. Nevertheless, Erekhtheus is both the earliest and the most common form of the name. Erikhthonios may well be, as Chantraine suggests, only a popular reconstruction of a non-Greek name to fit the legend. He also points out that Erekhtheus was a divine epithet usually linked to Poseidon. Diodoros was not the only source to claim that Erekhtheus was an Egyptian colonist. Anne Burton cites another source stating that he came from Sais.¹⁷¹ A possible Egyptian etymology for his name is Erekhtheus is 3ḥty “horizon dweller,” a frequent divine epithet. Thus, two of the names claimed by Diodoros’ Egyptian informant, Pētēs and Erekhtheus, have possible if not plausible, Egyptian etymologies and lack Greek ones.

Erekhtheus was supposed to have introduced the Eleusinian Mysteries from Egypt to Attika.¹⁷² Burton also points out that Apollodoros and the Parian Marble agree that the cult of Demeter was introduced to Attika from abroad. Apollodoros placed the introduction in the reign of Pandion and the Parian Marble in that of Erekhtheus.¹⁷³ Furthermore, in the twelfth century CE the Byzantine scholar Tzetzes quoted Kharax of Pergamon, a priest and historian of earlier centuries CE, on Kekrops’ having colonized Athens from Sais.¹⁷⁴ Burton rejects Paul Foucart’s case, made at the beginning of the twentieth century and based on cultic similarities, that the Eleusinian Mysteries were introduced from Egypt. She claims that his work has been superseded by that of G. E. Mylonas and other later writers.¹⁷⁵

Black Athena Writes Back touches on this debate.¹⁷⁶ Here, however, it

should merely be pointed out that Diodoros' Egyptian informants were probably right when they claimed that the two Eleusinian priestly families—the Eumolpids and the Kerykes—saw themselves, at least in Hellenistic times, as Egyptians.¹⁷⁷

Kekrops

Arguments in favor of derivation of the names Athens and Athena from Ht-ntr (nt) Nt will be set out at the end of this chapter. The identity of these names should be sufficient to explain the relationship seen by Greeks and Egyptians at least since the sixth century BCE.¹⁷⁸ At this point, however, we shall look at the name of the city's legendary founder, Kekrops. This name, I maintain, is Egyptian. Despite the statements by Kharax and others that Kekrops came from Sais, other evidence suggests that he was not connected to that particular Egyptian city.

Like many Greek cities, Athens was supposed, according to legend, to have had more than one foundation. It was generally acknowledged, however, that the first of these was that of Kekrops, although even he was seen as the successor to his father-in-law King Aktaios.¹⁷⁹ Like some other writers, Apollodoros specified that Kekrops was autochthonous, but maintained that the founder had “two natures.”¹⁸⁰ Pausanias held there were two Kekropes, one early and one somewhat later. He and others also maintained that Kekrops was part man, part serpent.¹⁸¹ As quoted above, however, Diodoros' Egyptian informants claimed that “two natures” meant that he was part Greek and part Egyptian.¹⁸² Herodotos distinguished Kekrops from the local Pelasgians, implying that he was the first of a series of outside settlers. Furthermore, he saw the name of “Athenians” as having been introduced by a later founder, Erekhtheus.¹⁸³ Apollodoros believed that the cult of Athena was introduced to Athens during the reign of Kekrops. Like Herodotos, however, he stated that the city was called Kekropia in his time.¹⁸⁴ The Roman historian Pompeius Trogus maintained in the first century CE that, although Kekrops had founded the city, its dedication to Athena only came in the reign of his successor Amphiktyon.¹⁸⁵ Pausanias referred to this later king but attributed only the introduction of the cult of Dionysos to him.¹⁸⁶ He did not specifically link Kekrops to Athena and, in another section of his work, described the devotion to Zeus of the founder of Athens.¹⁸⁷ To sum up, given the clear identification of Athena with Athens, it is remarkable

how relatively little ancient historians associated the city's founder with its matron goddess.

According to the Parian Marble, Kekrops was supposed to have begun his reign in 1581, that is sixty-three years before the same stone set out Kadmos' arrival at Thebes and seventy years before Danaos' landing in the Argolid.¹⁸⁸ While 1581 is far too low for the Revised Ancient Model, no reason can be made to challenge the sequence given on the inscription. Hence, if the Hyksos invasions are to be placed in the late eighteenth century, Kekrops, if he is to be given any historicity, must come still earlier.

The historian Hekataios of Miletos maintained that the name Kekrops was foreign.¹⁸⁹ Paul Kretschmer argued that there had been metathesis and that the name had originally been *Κέρκοψ "with a tail" Κέρκος "tail."¹⁹⁰ His argument was based on the tradition that Kekrops was half man and half snake. The original meaning of *kerkos*, however, was "stick" but it was extended to any thin projection from the body: "pig tails, penises" etc. This certainly did not include tails, like those of snakes, that were an extension of the body itself. For these tails the general term οὐρά was used.

Returning to Hekataios' view of a foreign origin, the name Kekrops bears a similarity to the frequently used prenomen H̄pr k3 R', H̄' H̄pr R' and H̄' k3w R' of the three Twelfth Dynasty pharaohs known today as Senwosret I, II, and III. The form closest to Kekrops is H̄' H̄pr R', the name of Senwosret II who was the least powerful and shortest-reigning of the three pharaohs. Later historians, however, confused their identities. In the third century BCE, for instance, Manetho fused Senwosrets II and III into the great Sesôstris.¹⁹¹

The final -ôps in Kekrops is the Greek word for "eye, face," that is frequently used as a suffix for persons. The metathesis of liquids from third to second position necessary to derive Kekrops from H̄' H̄pr R' was discussed at the end of Chapter 8. In any event, it is no more difficult to demonstrate such a connection than it is to show the generally accepted one between S n Wsrt (Senwosret) and Sesôstris or Sesôsis.

The accepted and hypothetical conquests of Senwosrets I and III have been discussed at some length in Volume 2. In the relevant chapters in that volume, however, I only suggested that Senwosret I campaigned to the north in Anatolia and possibly other regions bordering the Black Sea.¹⁹² Here I should like to go further and consider possible contacts between Egypt and the Aegean during the Middle Kingdom.

Athens and Middle Kingdom Egypt

Writing almost two thousand years after the alleged events, Diodoros reported:

Of Rhadamanthys, the Cretans say that of all men he rendered the most just decisions and inflicted inexorable punishment upon robbers and impious men and other malefactors. He came also to possess no small number of islands and a large part of the sea coast of Asia, all men delivering themselves into his hands of their free will because of his justice. . . . Moreover, because of his very great justice, the myth has sprung up that he was appointed to be judge in Hades and the same honour has been attained by Minos [Rhadamanthys' brother].¹⁹³

The image of the brothers' judgment of the dead, which was also reported by Hesiod and Homer, is thoroughly Egyptian. In Volume 2, I argued that there were intricate parallels between the legendary Cretan king Minos and the first Egyptian pharaoh Min/Mēnēs and his brother Rhadamanthys, founder of the Middle Kingdom.¹⁹⁴ This raises a number of possibilities: (1) Middle Kingdom Egypt had contact with the Aegean. (2) Egypt had some kind of hegemony over that region. (3) Twelfth Dynasty pharaohs were involved in founding Kekropia or proto-Athens.

Evidence from archaeology and art history make the answer to the first question clear. Egyptian contact with the Aegean can be seen from Egyptian objects found in Middle Minoan Crete. Although considerably less plentiful than those found from the Late Bronze Age, around thirty have been listed. There are scarabs and worked gold hilts of daggers or swords.¹⁹⁵ The most striking of all is the statue from the Twelfth Dynasty of an official called User. The context of the find is unclear but in the latest study of the statue Eric Uphill has argued persuasively that it fits a general Middle Kingdom pattern of distributing statuettes of ambassadors, officials, merchants and craftsmen and, therefore, should be taken as having arrived in the Middle Minoan period.¹⁹⁶

In Egypt, there have been considerable finds of Cretan pottery from the Middle Minoan II period corresponding to the late Twelfth Dynasty. Most of the pottery has been found at El Haraga and Kahun at the mouth of the Fayum about which the Egyptologist Barry Kemp and the archaeologist R. S. Merrilees have written:

The important Middle Kingdom cemeteries at El-Haraga may well have served this town rather than some known desert edge community. There is a specific reference to a royal palace somewhere in the Fayum area at this time but whether here or towards the Fayum proper . . . cannot be determined. Nevertheless, the location of Senusret II's pyramid nearby is itself indicative of a royal interest in this area during the Middle Kingdom.¹⁹⁷

Pottery from Middle Minoan IA and IB and II and a serpentine lid typical of Crete have been found in sites from elsewhere in Egypt.¹⁹⁸

These finds are only the tip of the iceberg. Iconographic developments leave no doubt that Egypt, the Levant and the Aegean had considerable cultural exchange, with the predominant flow in this period coming from Egypt. The intricate interactions between Egyptian and Cretan art during the Middle Kingdom has been traced by Arthur Evans, Wolfgang Helck and more modern scholars.¹⁹⁹

The Australian art historian Janice Crowley has listed five motifs that she sees as having been transferred from Egypt to the Aegean during the Cretan Old Palace period, which corresponds with the Middle Kingdom. The five motifs are palms and palmettes, papyrus scale pattern, the tree-watering ritual and the Egyptian hippopotamus goddess of childbirth. The assistants of the childbirth goddess became the Minoan "genii" and went on, I argue, to become Greek nymphs and muses.²⁰⁰

The answer to the second question of whether Egypt had any kind of hegemony over the region in this period is less clear-cut. The predominant direction of cultural flow suggests this is true, as does the association of finds of Cretan pottery with royal sites. The sensational discovery of the "Tôd Treasure" also indicates that Egyptian hegemony may have covered the region. The Tôd Treasure was sealed in the reign of Amenemhet II, the son of Senwosret I and father of Senwosret II; it consists of many precious objects but the most significant is a group of 143 crushed silver bowls. When discussing the treasure in Volume 2, I argued that as it was found in the temple of Mont, the god of conquest. Primarily found toward the north, the bowls may well have come to the treasure as military loot or as tribute from defeated peoples. I also argued in Volume 2 that these objects came from Anatolia and were associated with campaigns there by Senwosret I and Amenemhet II.²⁰¹ More recently however, scholars have started looking farther west. Peter Warren now argues that "many of the Tod vessel forms have very close ce-

ramic parallels in MMIB-II Crete, sufficient to indicate a Minoan origin or at least strong Minoan influence upon the silver vessels.”²⁰² Thus, there is some justification in supposing, not merely that Egypt staged campaigns in Anatolia in the twentieth and nineteenth centuries BCE, as I argued in Volume 2, but also that these had at least a political, if not a military, consequence for the Aegean.

Evidence is still more sparse when we come to the third question: Could Twelfth Dynasty pharaohs have been involved in the foundation of Kekropia or proto-Athens? A positive answer does not necessarily follow even if one accepts an equation $H_3' H_{pr} R' = \text{Kekrops}$. The Greek name Memnōn survived for a millennium after the reign of pharaohs called $\text{Imn m } \dot{h}t$.²⁰³ Similarly, the name $H_3' H_{pr} R' // \text{Kekrops}$ could have remained as a free-floating heroic title, suitable for attaching to the foundation of a city. Nevertheless, we should consider the possibility that Egyptians of the Middle Kingdom were involved with Attika. Given the Middle Kingdom cultural connections with Crete and the possibility of Twelfth Dynasty campaigns in Anatolia carrying effects farther west, such involvement is not out of the question. Unfortunately, later building in Athens has left little trace of Middle Helladic remains there.²⁰⁴ Thus, in this instance, the archaeological record can be of no help on this problem. Evidence of Attic contact with Egypt does exist, however. In Egypt artifacts of silver made in the Middle Kingdom have been found to contain lead traced by lead isotope analysis to the mines at Laurion in Attika.²⁰⁵

The romantic image of the Athenians as simple farmers who were above crass materialism has led to a significant underestimation of the importance of these silver mines to the Athenian economy.²⁰⁶ Given the exports of lead and silver from Laurion in the Middle and Late Bronze Age, Attika would seem to have had an economic significance in the Second Millennium BCE. Thus, the lists of Athenian kings before the Trojan War should not be dismissed out of hand.²⁰⁷ If, as seems reasonably plausible, the strong Greek tradition of Kekrops and the equally strong Egyptian one of Sesōstris can be linked to the historical figures of Senwosrets I, II and III, settlement of Athens by members of an Egyptian expedition or other people making use of the pharaoh's name and prestige would provide a coherent description of the city's first foundation. This explanation puts the founding in the first half of the nineteenth century BCE. Naturally, however, this must remain merely a tentative working hypothesis.

As such, it would nevertheless, provide a plausible background for a second foundation of the city, connected to the cult of Athena. Hyksos expansion from their first base in the Argolid would be the second wave. For the new settlers, some 200 years later, Kekrops and his city would indeed seem autochthonous or “double-natured.” The garbled record of the new settlement would be in the legends surrounding Amphiktyon, Erekhtheus and Theseus. The use of Amphikyton probably refers to the organization of the Attic federation, or amphiktyony, often attributed to Theseus.²⁰⁸ According to Diodoros’ Egyptian informants, Erekhtheus, king of Athens, was born an Egyptian and continued to have connections with Egypt.²⁰⁹

Troizen

Theseus began his heroic journey to Athens from Troizen. The city’s reputation for extreme antiquity and the early association of Apollo with Oros/Horus and Pitheus with Ptah were discussed in Chapter 19.²¹⁰ In that chapter I discussed what Pausanias saw as the most ancient temple in Greece, the sanctuary of Apollo Thearia. At the beginning of the nineteenth century, the English traveler Sir William Gell reported seeing at or near that site strange flat-sided, eight-sided tapering columns of a stone resembling black basalt. He believed that these must have come from the most ancient sanctuary described by Pausanias more than 1,600 years earlier.²¹¹ James Frazer seems to have seen some of these columns and he accepted Gell’s conjecture that as they were “so different from the ordinary types of Greek columns [they], may have belonged to the sanctuary of Thearian Apollo.”²¹²

Tapering, flat-sided octagonal pillars have been found from Middle Kingdom Egypt, in tombs of Nomarchs at Beni Hassan and other tombs in central Egypt, as well as at the earliest temple at Deir el Bahri, one built for Mentuhotep II.²¹³ They seem to have been abandoned, during the New Kingdom for more elaborate forms. Scholars as early as Champollion have seen these earlier columns as forerunners or even prototypes of Doric forms.²¹⁴ Like all Greek columns, however, the Doric were fluted, a form deriving from bound reeds that had been used in Egypt and southwest Asia at least from the Third Millennium.²¹⁵ Thus, while an influence from the Egyptian octagonal columns is clear, local modification is equally clear. The “unGreek” columns at Troizen show one route influences could have taken from Middle Kingdom Egypt to

the Archaic Peloponnese. The idea that Pausanias could have seen a sanctuary constructed in the first half of the Second Millennium BCE is no more surprising than the survival of the Parthenon or the Pantheon into the twenty-first century CE.

Indo-European offers no explanation for the name Troizen or Trozen. On the other hand, a plausible etymology exists from the Egyptian city name T3 Sn (Esna), which was the major cult center of Nēit in Upper Egypt.²¹⁶ This derivation leads to a possible religious association between Troizen and Athena. As at Athens, Troizen had a tradition that its original name was different and that the cult of Athena was introduced sometime after the city's foundation.²¹⁷ Thus, the cults of Athena and Poseidon, which became central at Troizen, seem to have been added to ancient worship of Apollo/Horus and Pittheus/Ptah. There may be some truth to the oracle quoted by Pausanias that Apollo and Poseidon had exchanged Delphi for Kalauria, an island off the coast of Troizein.²¹⁸

According to Pausanias, this exchange came during the reign of Oros' son Althepos. Athena and Poseidon had a dispute over the land and Zeus ordered them to share it.²¹⁹ In Volume 2, I discussed various aspects of this mythical struggle in which I see the dominant aspect as Athena's or Nēit's imposition of order on the forces of chaos symbolized by Poseidon/Seth.²²⁰ The most famous example of this struggle is, of course, the battle set in the Attic Athens, although it was also reported of other places dedicated to Athena in Boiotia and at Troizen. On the acropolis of Troizen a temple of Athena was known as Polias "of the city" and **Σθενιάς** was its root. Conventionally **σθένης** (H) is translated as "strong," however, Sthenias, which is used as a divine epithet for both Athena and Zeus, is very old and very odd in Greek: it is the only word beginning with sth-. It has no Indo-European etymology but has two plausible Egyptian sources that could easily have become conflated; *stny* "to distinguish, honor" and *sthn n* "to make dazzling, radiant." For Athena's association with brilliance and the Egyptian word *th n* in particular see below.²²¹

While Athena's temple was on the Akropolis, Poseidon's was outside the city wall. That position does not mean he was not central to Troizen. Strabo and Pausanias even called the city Poseidonia.²²² His titles were Basileus "official, king" and Poliouchos "holder of the city." Fifth-century coins of Troizen had a portrait of Athena on the obverse with Poseidon's trident on the reverse.²²³

Poseidon was also the patron god of the Kalaurian League, an

amphiktionyn based on Kalauria just off the coast of Troizen. This ancient league, which included Troizen, Athens, Aigina and the Boiotian Orchomenos among its seven members, not only cuts across Iron Age tribal lines but also the boundaries of the late Mycenaean kingdoms.²²⁴ Therefore, it is plausible to suppose that it originated before their consolidation. Archaeological evidence suggesting the antiquity of the cult of Poseidon at Kalauria comes from a Second Intermediate period or Eighteenth Dynasty scaraboid found in a Late Helladic context inside the oldest temple of Poseidon in Kalauria. Its back was in the shape of a hippopotamus, an animal associated with Seth. On the face, a pharaoh on a chariot rides over fallen enemies; the chariot is associated with both Poseidon and Libya.²²⁵

No one doubts the centrality of the cults of Poseidon and Athena in Mycenaean Greece and particularly in Troizen and Athens. In myth Poseidon, sometimes in the guise of Aigeus, was the father of Theseus, the city hero of both Troizen and Athens. Poseidon's identification with Seth and the centrality of Poseidon and Athena to Mycenaean and Hyksos religion were discussed in Volume 2.²²⁶

In this section we are concerned with the hero's mother Aithra whose name seems to be linked to *aithēr* "upper air," which has also been associated with Athena.²²⁷ Another association between the two comes from a report by Pausanias that Aithra had been entrapped by Poseidon as the result of a dream sent to her by Athena.²²⁸

Like Seth for the Hyksos or Poseidon for the Mycenaean, Athena seems to have been a special protector of the new invaders. According to Diodoros, Danaos landed in Rhodes where he founded the temple of Athena at Lindos before he reached Argos. A little later Kadmos founded a cult of Poseidon at Ialysos on the same island. Kadmos was also supposed to have presented a bronze cauldron inscribed in Phoenician letters to Athena's temple at Lindos.²²⁹ This gift is also reported in the Lindian list of religious offerings. Across the Argive Gulf from Troizen Pausanias described: "From Lerna another road runs by the seaside to a place which they name Genesium [birthplace]. Beside the sea is a small sanctuary of Genesian Poseidon [Poseidon of birth]. Adjoining Genesium is another place named Apobathmi ['landing place'], where they say Danaos and his daughters first landed in Argolis."²³⁰ A little earlier in the text, Pausanias had referred to a sanctuary a few miles up the coast where there are two sanctuaries of Athena. The first, by the short river Pontinos, was supposed to have been founded by Danaos, and the second, a sanc-

tuary of Athena Saitis, was on top of the mountain from which the river flowed.²³¹ In his commentary on this Frazer did not speak in his own voice but quoted the geographer William Martin Leake, who was born in 1777 and, therefore, has been formed before the advent of the Aryan Model:

The ruins of a castle . . . now occupy the summit of the hill, and consequently stand on the site of the house of Hippomedon and of the temple of Minerva [Athena], whose epithet Saïtis indicates that her worship here was introduced from Egypt, and thus agrees with the reputed foundation of the temple by Danaus. At Sais we know that Nēith the Greek Athene, was held in great honour.²³²

Frazer partially reasserts his orthodoxy to the Aryan Model by cross-referencing his discussion of Pausanias' statement in (Book 9: 12.2) that the Egyptian name of Athena was Athena Saitis. There Frazer writes, "The Greeks identified her [Nēit] with Athena (Herodotus, ii.59; Plato, *Timaeus*, p.21E; Hesychius, *s.v.* Νῆϊθ), partly perhaps on the ground of the resemblance between the names."²³³

Some authorities consider that in Hyksos Egypt, Seth's consort was probably 'Anat.²³⁴ According the epitome of Manetho's *History* by the Christian writer Julius Africanus, the first Hyksos king was called Saitēs.²³⁵ Mallet interpreted this to mean that he made his residence at Sais.²³⁶ Another possibility would be to link him to the Hyksos name 'Anat Ḥr, mentioned above, and to place him as a devotee of 'Anat/Nē it. Too much should not be made of this since Josephus rendered the name from Manetho as Salites. Salites has been equated with a pharaoh called Sarek (Sa 'rk) who was mentioned in a list of priests from Memphis.²³⁷ Gardiner and von Beckerath, however, see Sarek as one of the last of the Hyksos.²³⁸ It is also strange that when referring to the Sethroite nome in the eastern Delta Josephus actually called it Saite.²³⁹ This reference makes it probable that Josephus, not Africanus, made the slip on the name of the first ruler. In any event it is clear that, like their descendents the Israelites, the Hyksos had a significant cult of 'Anat and it seems likely that this was seen in Egyptian terms as a cult of Nēit.

Such an interpretation would fit the historical pattern of the Revised Ancient Model for Crete. It has been mentioned above that while the iconography of the Shield Goddess existed earlier, it had only become widespread in Middle Minoan III. Furthermore, the discovery of the

Hyksos scarab in the room with the children's bones suggests some contacts between the cults.

SUMMARY OF THE CULTIC EVIDENCE

The legendary evidence from Athens and the legendary and physical evidence from Troizen indicate that Egypt had cultural and religious influence in the Argolid and Attika during the Egyptian Middle Kingdom and the Middle Helladic period on mainland Greece and that Egypt could have had political influence over parts of the Aegean during these centuries. The early cults that survived seem to have been of Horus and Ptah. At a later stage, probably sometime in the late eighteenth century BCE, a new wave of influence arose and was associated with the Hyksos. In this second wave, the dominant figures were the rivals Nēit/Athena and Seth/Poseidon.

ETYMOLOGY OF NAMES

All the above is, of course, speculative. What seems overwhelmingly likely, however, is that Athena derived most of her attributes from Nēit and that the name Athena or Athanaia comes from the Egyptian Ḥt-nṯr (nt) Nt.

First, we should consider some Greek proper nouns associated with Athens and Athena and their plausible Egyptian etymologies.

Place-names

In his myth of the grandeur of ancient Athens Plato set the boundaries as Mount **Λυκαβηττός** to the east and the hill of the **Πνύξ** to the west.²⁴⁰ A plausible origin for Lykabēttos is from the Egyptian **ḥt iḥbt** “luminous region in the East, where the sun rises,” a toponym that appears in the *Book of Coming Forth by Day*.²⁴¹ For the derivation of **Πνύξ, Πυκνός** — the meeting place for the citizen juries of Athens from ***pṣ qnbt** “the court, of magistrates, tribunal, judicial council etc.,” see Chapter 9.²⁴² Neither of these have Indo-European etymologies.

Plato's school was established in 385 BCE in a wooded district northwest of the city walls of Athens called **Ἀκαδήμεια**. Diogenes Laertius derived this name from the obscure mythical hero **Ἑκαδήμιος**. He also maintained that the original name was Hekadēmy not Akadēmy.²⁴³ Akadēmeia was situated between two roads: the main road to the north-

west from the Dipylon, the greatest gate in Athens, and the “Sacred Way” to Eleusis on which religious processions entered Athens. Sometimes this procession too went through the Dipylon; at other times it may have gone through another gate just 60 yards away.²⁴⁴ This would fit neatly with *qr dmi “entry into the city, entry district.” The Coptic for ‘q is *ōk*; on the other hand, ‘qy “solemn entry of the king” became *aik* “consecration.” The long /ē/ in Akadēmy matches that found in *dēmos* derived from *dmi*.²⁴⁵ The place-name antedated Plato and, given other evidence of his lack of any knowledge of Egyptian, it is unlikely that he understood its meaning even though it was particularly appropriate for his school.

Mythical beings

The first of these descriptions is the derivation of *παρθένος* from the Egyptian *Pr t̥hn. Here once again we are concerned with Nēit’s association with Libya. Arthur Evans paid particular attention to the Libyan people known to the Egyptians as T̥hnw.

The T̥hnw, who lived to the west of the Nile Delta, were known for their “T̥hnw oil,” which Newberry identified with olive oil (providing yet another association with Athena, whose sacred tree was the olive) and for faience which in Egyptian was called *t̥hnw*.²⁴⁶ These products were connected, as Evans explained, by the supplies of natron (sodium carbonate) necessary for the manufacture of faience and found in the Libyan oases.²⁴⁷ Alan Gardiner, too, wrote about the T̥hnw. He pointed out that, although they were Libyans living in Cyrenaica and had been previously thought to have been “white,” they were represented in Egyptian paintings as physically resembling Egyptians although dressed barbarically.²⁴⁸ Gardiner further considered the possibility that the T̥hnw lived farther south, in or near the Fayum.²⁴⁹ More recently, Vandersleyen has rejected his hesitation on this.²⁵⁰ In his note on the subject, Gardiner mentioned an Old Kingdom reference to a Nt T̥hnw.²⁵¹

Henri Gauthier, the geographer of Ancient Egypt interpreted Pr t̥hn as “house of crystal, house of faience.”²⁵² The name is attested for the temple of Osiris at Sais. The phonetic and semantic parallel of Pr t̥hn with Parthenōn is striking. The Egyptologist Arno Egberts objects to such a derivation. He admits that he can provide no alternative and that the phonetic correspondence between Pr t̥hn and Parthenōn is excellent. An analogy with the Coptic *tehne*, from an earlier *dhnt*, suggests that the stress in *t̥hnt* lay on the first syllable, hence yielding a Greek *-then.

Egberts' objection is semantic: How could maidens be associated with Osiris who was so virile that he could even impregnate his sister/wife after his death?²⁵³ Egberts has clearly scored a point in that Parthenōn is unlikely to have derived from this particular Pr *ṭhn*. Nevertheless, I maintain that the etymology still holds. The first ground for this claim comes from Nēit's tight and ramified connection with *ṭhn*, which will be explored further below. From the Saite period there are direct references to Nt *ṭhn*.²⁵⁴ The second ground comes from the toponym Pr 3ḥt "house of the brilliant." This synonym of Pr *ṭhn* is attested for temples of Hathor and Nēit.²⁵⁵ Third is the image of young women as "brilliant" and "sparkling" in many cultures. Fourth, the combination Pr+ *ṭhn* is likely because the extreme frequency of the toponymic prefix Pr-. Gauthier lists more than five hundred instances. Thus the chances of temples or other buildings, as well as the divinities who share their names, named *Pr *ṭhn* are high.

Through sacred paronomasia, Nēit was associated both with the *Ṭhnw* and with the product of their land *ṭhn* "faience." As an adjective *ṭhnt* is defined as "brilliant, flashing, jewels, blue green." The last is the color of faience. It was also seen as the color of the bright sky and fragments of the firmament as they appeared on earth in the form of the green mineral malachite.²⁵⁶ *Parthenos* in Greek means "young woman, virgin" and was especially used for the virgin goddesses Artemis and Athena. The Egyptian and Greek words share a number of specific meanings. Both convey "blooming" and "happy." *Ṭhnt* was also used for "bright eyes of divinities" and for a part of the eye. The word *parthenos* also has a special sense of "pupil."

Athena had a number of epicleses concerning eyes: Ὀφθαλμίτις and Ὀξύδερκής. Above all, the Homeric epithet Γλαυκῶπις, applied to her and other frightening creatures, meant "pale and brilliant eyes." This obviously derives from the word γλαυκός (H) "gray, light blue, terrible, brilliant." Indeed *glaukos* is another word that Jasanoff and Nussbaum admit lacks an Indo-European etymology.²⁵⁷ It has a good Egyptian one, however, in *g3g3* "dazzle, amaze," which is written with the eye determinative. There was also a goddess called *G3g3wt* but it is impossible to tell whether she was a form of Nt. *Glaukos* is also related to γλαῦξ γλαυκός (H) "owl," the large-eyed, ferocious bird and epithet of Athena that is parallel to Nēit's vulture. *G3g3* also provides an excellent etymology for Γοργώ, which also had the combined form Γοργῶπις meaning like γλαυκῶπις "fierce look." The face and eyes of the Gorgon petrified all

that saw them. Her close and ancient association with Athena has been referred to above.²⁵⁸

In Utterance 317 of the *Pyramid Texts* the crocodile god Sobek, son of Nēit, brings “greenness to the eye of the great one [feminine].”²⁵⁹ This description plausibly refers to Nēit herself. In the Fifth Dynasty inscription referred to above, the term Nt Tḥnw is followed by “eye of Nt.” The Egyptian Egyptologist Ramadan El Sayed plausibly suggests “this is perhaps an aspect of Nēit worshipped in this period by the Libyans.”²⁶⁰ Plato described the eyes of Pheidias’ statue of Athena in the Parthenōn as set with jewels and Cicero saw light-blue flashing eyes in the ideal type of Athena’s Roman counterpart Minerva.²⁶¹ Diodoros rejected the “Greek idea” that Athena had blue eyes as “a silly explanation.” According to him, the real reason why the goddess was called Glaukōpis was because “the air has a bluish cast.”²⁶² In fact, the two images are not mutually exclusive and there is no reason to deny that Athena was sometimes represented as having flashing blue eyes. In many societies, such as those of Mongolia and China, where the overwhelming majority of the population is brown-eyed, blue eyes have been traditionally seen as a sign of ferocity. A striking illustration of this can be seen in the New Kingdom picture of a ferocious “hippopotamus at bay.” The hippopotamus was an animal of Seth. In reality hippo’s eyes are dark with a pinkish tinge, but this one’s eyes are painted a bright blue.²⁶³

In ancient as in modern Greece blue eyes were associated with the “evil eye,” indicating all kinds of bad characteristics. Thus the connotation of Glaukōpis was that the paleness of Athena’s eyes added to the terror she inspired.²⁶⁴ The same could well have been true of Nēit in Egypt. In any event, her associations with blue-green faience and the bright sky and the association of *tḥn* (*t*) with eyes suggest that (although in late tradition hidden by a veil) her eyes too could be seen as blue.²⁶⁵ Pausanias, explicitly stated that the story of Athena’s blue eyes came from Libya.²⁶⁶ Thus, we may have the paradox that the goddess’s blue eyes came from Africa. While this complicates the name Black Athena, it strengthens my overall case and that of my preferred title **African Athena*.

HṬ NṬR (NT) NT ATHENA(IA)

The claim that Kekrops was Egyptian has been discussed above. At this point I shall return to the quotation from Kharax of Pergamon: “Kekrops

coming from the town of Sais in Egypt colonized Athens. Sais according to the Egyptians, is said *legetai* Athena.²⁶⁷ The simplest way to understand the last sentence is to say that Hellenistic Egyptians saw “Athena” as a name of Sais. Sais was, in fact, only the secular name of the city. Its religious name, attested in hieroglyphic texts, was Ḥt Nt or Ḥt nṯr (nt) Nt.²⁶⁸ Arno Egberts, my most formidable critic on this issue, attacked my original derivation from Ḥt Nt . He had no semantic objection to the identification of Nēit with Athena or of Athens with Sais. He is aware that this view was conventional among Greeks. Also as an Egyptologist he knew that Egyptian divinities were frequently referred to by their dwellings.²⁶⁹

Egberts’ three objections were to the phonetic correspondence between Ḥt Nt and Athena. His first objection was to the derivation of ’Aθ- from Ḥt or Ḥwt “temple.” He claimed that even in the Second Millennium it was normal for the final -t to be elided. While a number of Greek renditions of the toponymic prefix Ḥt- were indeed ’Aθ- in nearly every case the /t/ in Ḥt was followed by a laryngeal /h/, resulting in the Greek *theta*, as in Athribis < Ḥt-ḥry-ib and Athur (Hathor) < Ḥt-Ḥr . A ground for an apparent exception was when Ḥt was followed by a /t/ which was preserved while the final -t in Ḥt was lost. Egberts cited a Coptic example: Atripe < Ḥt-t3-rpyt .²⁷⁰ His case for the last is not clear since the origin of the Greek Αθριβις in Upper Egypt is almost always attested in inscriptions in the form Ḥt-rpyt without the feminine article *t3*. Alan Gardiner supposed that it was said but not written.²⁷¹ Egberts sees the /t/ as inserted and sometimes written with 𓂏 (N16) *t3* “land” for the Lower Egyptian Athribis. Neither of these scholars entertain the possibility that the /t/ comes from the original -t in Ḥt . For them the true situation appears in two other cases: Auaris < Ḥt-w’rt and Aigyptos < Ḥt-k3-Pth . In these instances, the /t/ was missing, according to the general loss of final -t at this time in Egyptian. Despite the complication with this Athribis, there is every reason to suppose that the Egyptological orthodoxy is right on this issue.

Egberts’ second objection is basically a repetition of the first. It follows from his reconstruction of the pronunciation of Ḥt Nt around 2000 BCE as *ḥVnVt , V being an unknown vowel. Thus according to him I had “smuggled” in a /t/ in the middle and (was) “smuggling away” one at the end.²⁷² It is generally reckoned that as a divine name, the -t in Nt was retained for religious reasons. Egberts’ third objection was my failure to explain the long vowel in the second syllable Athēna < Athāna .²⁷³

I believe that these objections can be met by turning to the attested forms Ḥt-nṯr Nt and Ḥt-nṯr nt Nt . Ḥt and Ḥt-nṯr are virtually synonymous, meaning “temple.” As mentioned in previous chapters Pr and Ḥt could both be used for the divinity and for a city central to their cult. It is also worth noting on the principle Gardiner applied to Ḥt-(t3)-rpyt that Ḥt-Nt may sometimes have concealed a Ḥt-nṯr (nt) Nt , increasing the number of instances of the latter form. The Middle Egyptian pronunciations of Ḥt-nṯr (nt) Nt can be reconstructed along the lines used by Egberts as $^*hV (n)\underline{t}(r)V(nt) nVt$. Looking first at the consonants, every Greek rendering of Ḥt loses its aspiration. Therefore, we should find $^*V(n)\underline{t}(r)V(nt) NVt$ (V again is an unknown vowel).

In Chapter 10 where Greek borrowings from $nṯr$ were considered, examples were given where the consonantal structure of $nṯr$ was rendered in full: $\kappa\acute{\alpha}(\nu\theta\alpha\rho)\omicron\varsigma$ and $\text{Κ}\acute{\epsilon}(\nu\tau\alpha\upsilon\rho)\omicron\varsigma$. In others the n - was dropped but the final $-r$ retained: $V\theta V\rho$: $\acute{\alpha}\theta\acute{\eta}\rho$, $\acute{\alpha}\theta\acute{\alpha}\rho\eta$ and $(\kappa\alpha)\theta\alpha\rho\acute{\omicron}\varsigma$. Others still preserved the n - but lost the final $-r$: $\nu\theta\omicron\varsigma$, $\xi\acute{\alpha}\nu\theta\omicron\varsigma$ and $(\text{Κ}\alpha)\nu\theta\omicron\varsigma$, etc.²⁷⁴ What was never lost was the $\underline{t}/\theta$ (theta was by far the most common transcription of the Egyptian $/\underline{t}/$). That this is not merely a failure to detect Greek words that have lost the $/\underline{t}/$ is indicated by the two Coptic compounds originally containing $nṯr$: *henēte* “monastery” < Ḥt-nṯr and *hont* “pagan priest” < Ḥm-nṯr “servant of god, priest.” In the first, the n - was preserved but the second is less clear. In any event the medial $-t$ -survived. It is also possible that the n - in the $nṯr$ in Ḥt-nṯr nt Nt survived in the place-name *Anthēnē*, near the site of Danaos’ landings in the Argolid.²⁷⁵

It is not difficult to derive the $-n$ - in Athena from that in Ḥt Nt . The omission of the final $-t$ is equally easily explained. This is not, however, because it disappeared in Egyptian early in the Second Millennium, because in the case of Nt the final $-t$ appears to have been retained archaistically. Rather the final $-t$ was simply not tolerated in assimilated Greek words.²⁷⁶ Thus the consonantal structure should be seen as $^*V(n)\underline{t}(r)V(nt) nV$. Dropping the n - and the $-r$, which on grounds given above seems permissible, it becomes $^*V(n) \underline{t}/\theta V(nt) nV$.

Now to consider the vowels. There is no doubt that Ḥt was vocalized $^*\text{Ḥat}$. Athribis in the Delta was transcribed Ḥa-at in Assyrian texts.²⁷⁷ All Greek renditions of Ḥt begin with A -. Thus in Greek we can reconstruct $^*A\theta(n)V(nt) nV$. The next vowel remains uncertain. However if the $/r/$ were lost it would probably lead to the vowel’s lengthening, still more so if there had previously been the genitive marker *nt*.

The original vocalization of the divine name Nt would seem to have been *Nāīt. The vowel's quality is suggested by the biblical name of Joseph's Egyptian wife >Āsənat which was probably from the Egyptian n(y) s(y) Nt "she belongs to Nt."²⁷⁸ The quantity is indicated by Plato's rendering of Nt as Nḡt̃θ.²⁷⁹ This and other renditions of Nt as Nit- or Neth also indicate an original form *Nāīt with an off-glide.

The glide does not always appear in Greek. It is not present in the Doric 'Aθᾶνᾱ or the Mycenaean Atana. Homer, whose language was sometimes more archaic than that written in Linear B, uses 'Aθηναΐη. The earliest form was presumably *Aθᾶναΐᾱ. This fits well with a reconstructed Egyptian *haṯyNāīt. In Greek the initial h- was de-aspirated, the /t/ rendered θ and the final -t dropped, thus giving *AθyNāīa. The etymology from Ḥt-nṯr (nt) Nt removes Egberts' three objections to the derivation. The θ is not derived from the -t in Ḥt but from the -t̃ in nṯr. This derivation, together with the Greek intolerance of final dentals, answers his first two objections. The elision of the -r from nṯr and possibly that of the genitival adjective nt would explain the long vowel ā>ē.

CONCLUSION

The imperfections of the phonetic aspect of this etymology should be seen in the context of the beauties of the semantic characteristics. The etymology from Ḥt-nṯr (nt) Nt, both city and divinity, explains the identity of the names of the Greek goddess and her cult centers or cities: Several places were called Athēnai and Athena was worshipped away from the city in Attika.²⁸⁰ Athens and Athena provide the only example in Greece in which the same name was used for the divinity and her city. The cultic parallels associated with weaving, sacred cloth, armor, the Palladion, and fire rituals are too deeply embedded to be explained away as fictitious constructions of the classical period. There was also the apparently universal belief among Greeks of the classical and Hellenistic periods that the associations rang true. Herodotos always referred to the goddess of Sais as Athena and Plato stated that "the founder of . . . [Sais] is a goddess whose Egyptian name is Nēith and in Greek, as they assert, Athena."²⁸¹ Then there is the explicit testimony of Kharax of Pergamon that Athena was an Egyptian way of saying Sais. Furthermore, neither the lexicographers nor my critics—Egberts, Jasanoff and Nussbaum—have proposed any alternative, let alone a more convincing etymology. Until someone does that, the derivation of 'Aθηναΐη from Ḥt-nṯr (nt) Nt remains plausible and should be allowed to stand.

CONCLUSION

The spectacular heritage of Egypt's monuments and a history counted not in centuries but in millennia stagger the critical sense and stifle criticism. Yet the creative quality of Egyptian civilization seems, in the end to miscarry . . . it is difficult not to sense an ultimate sterility, a nothingness, at the heart of this glittering tour de force. . . . Egypt's military and economic power in the end made little permanent difference to the world. Her civilization was never successfully spread abroad . . .

—J. M. Roberts, *The New History of the World*
(2002, p. 86)

The purpose of these volumes is to refute this widespread conventional view repeated by Roberts. I hope to have demonstrated that neither Ancient Egypt nor the pagan Levant were dead ends. Both of them, through Greece and Rome and the civilizations of the monotheist religions, have been central and crucial to western history.

This volume is the last in the series. Originally I envisaged three but later toyed with the idea of writing four. I have now returned to the original number. The pattern has, however, changed. In the Introduction to Volume 1, I proposed that the second volume would encompass, archaeology, Bronze Age documents, place-names and vocabulary of Egyptian and Semitic origins! The third was to be concerned with mythological parallels. While writing Volume 2, I realized that I had bitten off far more than I could chew and that language required a separate volume. At the same time, however, I was taking so much material from the draft of the volume on mythology that what was left would be more appropriate for articles than for books. Hence, this final volume has been more or less restricted to language.

In its early chapters, I consider language families. Other scholars have convinced me that (1) Afroasiatic and Indo-European are, at a deep level,

genetically related, and (2) that there were lexical exchanges between northern Afroasiatic and PIE. The focus of this book is, however, on connections between specific languages: Egyptian and West Semitic, on the one hand, and Greek, on the other.

I have looked for possible Afroasiatic influences on Greek at four levels: phonology, morphology, syntax, and lexicon. The first two attempts were largely unsuccessful. Certain phonemes, notably prothetic letters, have become far more frequent in Greek than in other Indo-European languages, as a result of lexical borrowings from Egyptian and Semitic. Nevertheless, no new phonemes developed from the latter. Similarly, only relatively few Greek morphological features can be derived from Afroasiatic. The introduction of Egyptian particles has somewhat influenced Greek syntax. Nevertheless, the major effect has been on vocabulary, and three-quarters of this volume has been devoted to this.

When facing those who suggest Semitic origins for Greek words, classicists have been known to respond along the lines of “it is always possible to pull Semitic etymologies out of a hat.” I argue that these possibilities come about precisely because so many such etyma actually exist. Behind the orthodox objection lies the belief that if one is sufficiently loose in phonetics and semantics one can find Afroasiatic derivations for any Greek word or name. My counter to this is that the etymologies proposed in the volumes of *Black Athena* have generally followed phonetic regularities. I have not, however, even attempted to create rigidities, partly because, when considering loans, one can never establish the elegant equations often possible within language families. Even more importantly, it is simply impossible to establish one-to-one phonetic correspondences among three languages, all undergoing different phonetic shifts during the three thousand years in which they were in contact.

The flexibility that this allows does not mean that “anything goes.” For example, I cite a word and a name: *anthrōpos* “man” and the god Dionysos. Both are central to Greek culture and both lack Indo-European etymologies, but I cannot find an Afroasiatic origin for either. Limits have been imposed.

Nevertheless, after thirty years studying these topics, I am more than ever convinced that approximately 40 percent of the Greek vocabulary and an even greater proportion of proper nouns can be derived from Afroasiatic languages.

I do not accept the mantra often repeated by orthodox historical lin-

guists that “a few certain etymologies are worth more than thousands of uncertain ones.” This idea assumes that there is no connection between languages *x* and *y* and that any argument to the contrary needs to have “proof.” I am convinced that between cultures known on other grounds to have been in contact, while quality of etymologies is desirable, quantity is also important. I believe that the more plausible etymologies of the kind proposed here one finds, the more additional ones should be accepted. It will be interesting to see whether the often intricately connected mass of evidence presented in this volume will convince scholars in the relevant disciplines. When dealing with a far more important issue, Charles Darwin expressed my views exactly:

Although I am fully convinced of the truth of the views given in this volume . . . , I by no means expect to convince experienced naturalists whose minds are stocked with a multitude of facts all viewed, during a long course of years, from a point of view directly opposite to mine. . . . But I look with confidence to the future—to young and rising naturalists who will be able to view both sides of the question with impartiality.¹

NOTES

INTRODUCTION

1. Tylor (1879).
2. Tylor (1896, 118).
3. Anon (1991), see also Weinstein (1992).
4. For a bibliography on the statue base, see Vol. 2, 431–4 and 617–8 and Cline (1994, 38–42). For the Thera paintings see Morgan (1988) and Doumas (1992). [In these notes any mention of a volume and number without an author's name refers to the *Black Athena* Project.]
5. For the Theban seals see Vol. 2, 507–9. For the Kaş shipwreck see Vol. 2, 472–3 and 624 and Cline (1994, 100–5). For the Tel Ed Daba'a frescoes, see Bietak (1995), Morgan (1995) and M. C. Shaw (1995). For the representations of Mycenaeans in Eighteenth Dynasty Egypt see G. T. Martin (1991, 48–9) and Parkinson and Scofield (1993). For the Aegean metals in Egypt see the bibliography in Vol. 2, 479–82 and 625 and Stos-Gale, Gale and Houghton (1995).
6. See Koutoulas, 2001. The Third Millennium dates have been used by the chauvinist group Davlos to claim that Greeks invented the pyramids. There is, however, no reason to doubt the dates Y. Liritsis and others reached through optical thermo-photo illumination. To achieve Greek priority, the spokesmen for Davlos have down-dated the Egyptian pyramids and do not mention the evidence of the development of the Egyptian pyramids.
7. See Burkert (1992, 2–3) and Morris (1992).
8. See Bernal (1995a, 302–4) and Bernal (2001, 313–6).
9. For a bibliography of Gordon's voluminous work on cultural contacts around the East Mediterranean in the Bronze Age, see Vol. 1, 539–40. Astour (1967a).
10. See Walcot (1966) and West (1971). West's work on Hesiod (1978) and (1985),

- which also emphasized Oriental connections, was published in the new atmosphere. For Ruth Edwards' difficulties in finding a publisher see Vol. 1, 423–6.
11. Koenen (1994, 1).
 12. See, for instance, Lefkowitz (1992a and b).
 13. See for instance, H. G. Wells (1920), Chap. 14, and the Durants as opposed to Kitto (1951), Finley (1970) and Starr (1961).
 14. For a discussion of Renfrew's attack on his more broad-minded predecessors see Vol. 2, 67–74. See also Bernal (1993, 241–2).
 15. Kristeller (1995).
 16. Chomsky (1987).
 17. For my position on the relative importance of the contributions of Mesopotamian and Egyptian thought and practice in the formation of Greek science, see Bernal (1992) and (1994). For objections to this see Palter (1993) and (1994) and my responses in Bernal (2001, 247–68).
 18. See Fowden (1986), Iversen (1984), Scott (1991) and Jasnow and Zausich (1995).
 19. See Rendsburg (1989) and Ray (1990) who were generally sympathetic and Jasanoff and Nussbaum (1996) and Egberts (1997) who detest my work.
 20. Kristeller (1995, 127).
 21. This issue is also discussed in Vol. 1, 3–4.
 22. There is a good summary of this argument in Fairbank and Reischauer (1965, 386–7).
 23. Koenen (1994), p.2.
 24. See Blackall (1958). Interestingly, Skandinavian intellectuals tried to “purify” their languages by removing German loans. Gerard Manley Hopkins, C. S. Lewis, J. R. R. Tolkien and others have attempted similar purifications for English.

Chapter 1

HISTORICAL LINGUISTICS AND THE IMAGE OF ANCIENT GREEK

1. Morpurgo-Davies (1998, 88–94).
2. Halevi was actually born in Castille though he made his name in Andalusia; see the sensitive study by Brann (1991, 84). For Halevi's linguistic speculations, see Loewe (1994, 127).
3. For a survey of these translations and studies, see Dillmann and Bezold (1907, 11–3).
4. See Vol. 1, 171.
5. Morpurgo-Davies (1998, 45).
6. Blench (2002b, 5).
7. Cannon (1990, 244–5) and Morpurgo-Davies (1998, 65).
8. Muller (1986).
9. For this scheme, see Morpurgo-Davies (1998, 14).
10. Aarsleff (1988, xl–lxv).
11. Morpurgo-Davies (1998, 98).
12. Vol. 1, 215–336.
13. Vol. 1, 286–7.
14. For the details, see Koerner (1989, 149–77).

15. This is discussed in Vol. 1, 370–3.
16. See Koerner (1989, 203).
17. For the influence of nineteenth-century geology on the Neo-Grammarians, see Christy (1983). A fervent faith in uniformitarianism can still be found in the twenty-first century; see Ringe et al. (2002, 60).
18. See Jankowsky (1968, 98).
19. This is admitted by Jasanoff and Nussbaum (1996, 181).
20. See Jakobson and Waugh (1990).
21. Bolinger (1950), Malkiel (1990) and Blench (1997, 170).
22. Trask (1996, 287–90).
23. For the few exceptions to this, see Holger Pedersen, who describes scholars who saw relationships between Indo-European and Semitic and between Indo-European and Uralic. Pedersen (1931, 335–9).
24. Koerner (1989, 94).
25. Burkert (1992, 35).
26. Both conditions are necessary. See, for instance, Dutch borrowings of the English football term “goal” within the short time span between 1900 and 1950. In northern Netherlands the word is pronounced *kol*, in the south and Flanders as *gon*, and by purists as *gol*. In this case the variation was caused by dialect differences in the borrowing language. A striking example of this factor can also be seen in two Italian borrowings from the Arabic *dār aṣ ṣin’a* “factory,” which became *darsena* “internal part of a port where ships are disarmed or repaired” (probably through Genoese) and *arsenale*, “naval shipyard, arsenal” (through Venetian). See About Nasr (1993, 43). I am also grateful to Dr. Lori Repetti for this example.
For drastic changes brought about over short periods, see the difference between the Japanese treatment of Chinese words introduced before and those borrowed after 630 CE. Bernal (2001, 114–6).
27. Burkert (1992, 35).
28. See Mallory and Mair (2000, 70–296).
29. See Lehmann (1993, 107–10).
30. See Ruhlen (1987, 55–8).
31. For a refusal to use “Indo-Hittite,” see Jasanoff and Nussbaum (1996, 203 n. 2). I have asked several Indo-Europeanists why they object to “Indo-Hittite.” I have never received a coherent answer.
32. Burkert (1992, 34).
33. This tendency in conventional historical linguistics is discussed by Sarah Grey Thomason and Terrence Kaufman (1988, 1–2). For a general account of the use and misuse of monoracinated trees see Gould (1989, esp. Chap. 1, “The Iconography of an Expectation”). For an argument in favor of the mangrove model, see Moore (1994).
34. Trask (1996, 201).

Chapter 2

THE “NOSTRATIC” AND “EUROASIATIC” HYPER- AND SUPER-FAMILIES

1. Ross (1991, 140–2); Wright (1991, 54–62); Ruhlen, (1987) and Flemming (2001). For a hostile assessment see Trask (1996, 381–96).

2. Hamp (1996, 11).
3. See Ross (1991, 144–5) and Wright (1991, 50–2).
4. Olender (1992, 1–2) points out that, although this was an official view put forward by St. Augustine, others proposed Syriac. In the seventh century Olaus Rudbeck envisioned a Danish-speaking Adam and a Swedish-speaking God.
5. See Möller (1906 and 1911) and Pederson (1931, 335–6).
6. Cuny (1937, 142) cited in Greenberg (2000, 9).
7. Trask (1996, 381). See Möller (1906) and Pedersen (1931, 335–6).
8. Stalin ([1950] 1972).
9. Wright (1991, 48–54); Ross (1991, 140–6) and Trask (1996, 381–4).
10. Hodge (1978) and (1984). Other scholars were thinking and writing although not publishing, along these lines. See Hoberman (1975) and Ray (1988).
11. Levin (1971a and 1995).
12. Bomhard (1981 and 1984) and Bomhard and Kerns (1994).
13. Greenberg (2000). He also includes Yukagir, Giliak and Chukchi. For a discussion of arguments that Altaic does not form a single family, see Greenberg (2000, 11–7).
14. Dolgopolsky (1998) has published 125 of these roots.
15. Bomhard and Kerns (1994, 2).
16. Ringe (1995) and Trask (1996, 404–6).
17. Ringe (1995, 71).
18. Ringe (1996, 11).
19. For references to such challenges, see Driem (2001, 154). Greenberg (2000) does not list Ringe's article in his bibliography.
20. Tucker (1965, 655).
21. Bomhard and Kerns (1994, 3–6). It is interesting to note that the families in which these occur most frequently are Indo-European and Afroasiatic.
22. For the Euroasiatic pattern, see Greenberg (2000, 200–2). The Afroasiatic and Indo-European incidence is discussed below in Chap. 21, nn. 4–5. Cavalli-Sforza and Cavalli-Sforza (1995, 182–5) strongly endorse these views.
23. Joseph Greenberg produced seventy-two morphological elements found in two or more Euroasiatic languages. Ruhlen (1987, 259) and Greenberg (2000, 1–23). In his second volume (2002), Greenberg invoked 437 common vocabulary items.
24. Starostin (1990).
25. Swadesh (1971).
26. Starostin (1990).
27. Greenberg (2000, 6), Starostin (1990), Bomhard and Kerns (1994, 34).
28. Bomhard (2002), Dolgopolsky (1984).
29. There is, of course, massive uncertainty in both Greenberg's claims (2000, 61–139) and my assessment of them in relation to Afroasiatic. Of the seventy-two items, fifty-one appear in Indo-European, forty-five in Altaic and thirty-four in Uralic. Afroasiatic, at twenty, is at the lower end of the main cluster. I do not have any figures for Kartvelian or Dravidian.
30. Dolgopolsky (1984, 84–5).
31. Hoberman (1975). One major difference he saw was “the presence in IE of the

- labiovelar series, which is not represented in AA" (1975, 12–33). In Chap. 5 (nn. 136–65), I demonstrate that they existed in Afroasiatic.
32. Ray (1988).
 33. See Pettinato (1981).
 34. See Bomhard and Kerns (1994, 218 §23). They write the PIE ^bb^[h]i/y. For the correspondence Egyptian m–Semitic b-, see Takács (1999, 291). Diakonoff (1970, 461 n. 23) and below Chap. 8, nn. 70–2. For a detailed study of Eblaite and other Semitic prepositions, see Pennacchietti (1981).
 35. Gelb (1977, 27). Gelb referred to four *in*, *ina*, *is* “to, for” and *asta* “for, to.” I can only suppose that with *is* he was referring to the Greek εἰς, ἐς “to, into.” This, however, has been plausibly derived from *en. I do not know what PIE root he linked to *asta*. Could he have been referring to the Latin *ast* “on the other side” similar to *at* “but”? Apart from the semantic difficulty of such a connection, the word has not been traced back to PIE. In any event, the other two examples I give bring the total back to four.
 36. Bomhard does not include the Semitic examples *na/n', *ni/*ne, nu/no “negation” as Proto-Nostratic. Bomhard and Kerns (1994, 681 §562). The Eblaite forms are taken from Gelb (1977, 23). The other Semitic forms are from Moscati et al. (1969, 121) and the PIE forms from Pokorny (1959). Orel and Stolbova (1995, xx, passim) and Takács (1999, 132) reconstruct the Egyptian /n/ as Proto-Afroasiatic “T” and give a number of examples from other Afroasiatic languages (mostly Semitic). Clearly there was, as in other languages, considerable interchange between the two sounds, but the evidence from the oldest Semitic languages, Eblaite and Akkadian, and the parallel with Indo-European suggest that the original phoneme was /n/.
- The Proto-World form “k(u)an” “dog” is found in the Chinese *quan* from Archaic *k'iwən. Karlgren (1964, § 479). For the PIE *ḱuon*, Orel and Stolbova (1995) set out two roots *kan (§1425) and *kun (§1498). They propose to link them by deriving both from a hypothetical *küHen. Leslau (1979, vol. III, 286) reported a form from the East Gurage language of Zway as *gəñi* but he saw this as a Cushitic loan word. He denied Ullendorf's (1950, 343) proposal to connect it with the Semitic *kalb* “dog.” The final -b is generally considered to be an affix marking wild animals. Diakonoff (1970, 461 n. 23); Takács (1994, 67) and Ehret (1995, 18). Thus, Ullendorf was clearly right.
- The situation is complicated by the cognicity of the Semitic form with the PIE ^wk^[h]elp, which is only found in Germanic, the English “whelp”; see Bomhard and Kerns (1994, 474 §319). Diakonoff (1995, 221) denied their proposed Nostratic root not only because he saw the final -b as a suffix, but also because the Semitic word had no labiovelar, k^w. This may be, but, as seen above, the root is frequently found with a medial -u-. Could *kwelp be a Semitic loan into Proto-Germanic? Nevertheless, it seems clear that, at least in this case, the original Afroasiatic final shifted from n>l, not the other way around. See also Sasse (1993).
37. Kerns, in Bomhard and Kerns (1994, 153). Some scholars even include Basque as a Nadene language.
 38. T. Bynon (1983, 278–80) and Mallory (1989, 115, 275).

39. This example is cited among many others by Greenberg (1972, 194).
40. For a skeptical view of this principle, see Grzymski (1980).
41. Nostratic and other language families, of course, could have separated from each other within Africa before that date. Apart from Nostratic, however, there are no traces of anything but exclusively African language families on the continent.
42. Hodge (1981b, 309). The archaeologist Patrick Munson (1986, 60–2) sees this material culture as probably that in which Proto-Afroasiatic was spoken. For arguments against this idea see below.
43. Wendorf and Schild (1976b); Hassan (1980, 431–8); and Clark (1980, 555–6). For a more cautious view, see Phillipson (1993, 98) who cites Wendorf and Schild (1989).
44. For these, see Phillipson (1993, 102). Querns, which date back 20,000 BP, were not necessarily used only to grind grains and tubers. They may also have been used to grind the ochre used in burials. Rock salt could also have been ground in querns. It is interesting that the the Nostratic root *mul/mol “grind” resembles the Afroasiatic root ml(h) “salt.” According to Ehret (2002b), the affix -h signified iterative “repeating.” See also Takács (1999, 152).
45. Hodge emphasized the importance of this tool (1981b, 309).
46. For this idea I am indebted to my father. For more, see Chap. 8 nn. 8, 36–7 and Chap. 16 n. 62.
47. Phillipson (1993, 9, 60–1 and 78). Phillipson (1993, 65) sees them at Howieson’s Poort in South Africa at 70,000 BP. See also Ehret (2002a, 23). This has recently been confirmed by the finds of fine flints and exquisitely carved bones at Blombos Cave on the same coast from approximately the same date, Henshilwood et al. (2001).
48. Wendorf and Schild (1976b); Hassan (1980, 431–8); Clark (1980, 555–6). For a more cautious view, see Phillipson (1993, 98), who cites Wendorf and Schild, eds. (1989).
49. Dolgopolsky (1998, 26).
50. Ibid. (1998, 30). Proto-Nostratic also had words for “bow.”
51. Hermann Möller (1911, 76 and 163) already had suggested these common etymologies for IE and Semitic. See also Bomhard and Kerns (1994, 219 n. 24; 502–4 n. 351 and 637–9 n. 518). These use a different set of correspondences from those Dolgoposky posits.
52. Hodge (1981b, 309).
53. Whittle (1985, 16–7).
54. Pearson (1983, 120).
55. Kerns (1994, 153), who sees Nadene as only spoken in mountainous regions, explains Chinese as the result of Tibetan expansion. On linguistic, but not archaeological grounds, Driem (2001, 408–33) sees the *Urheimat* of Tibeto-Burman, of which Chinese is a member, as a Neolithic culture in Sichuan. The agriculture of this culture, however, depends on such cereals as foxtail millet (*Seteria italica*) and broom-corn millet (*Panicum miliaceum*) and these appear to have come from northwest China. (Li, 1983, 30) and Chang (1983, 68). Thus the origins of the Neolithic culture would seem to derive from the microlith-using gatherers and harvesters of that area, who were almost certainly not Nostratic speakers.

56. Phillipson (1993, 98).
57. Alison Brookes, the distinguished archeologist of Africa, accepts this principle. Brookes (2002). *Pace* Hassan (1980, 433–4) who denies it strongly.
58. Dolgopolsky (1998, 19) used the word “subtropical,” which he later (1999, 43) changed to “warm Mediterranean.” The names for tropical animals do not provide an altogether reliable guide as they can easily be adapted to fit another ecozone, for instance, the Egyptian *db* “hippopotamus” became the Canaanite *doh* “bear.”
59. Bomhard and Kerns (1994, 145–54). Kerns provides no archaeological evidence to back this hypothesis.
60. Bomhard and Kerns (1994, 35, 153).
61. Starostin (1990). The uncertainty of glottochronology has been mentioned above. Furthermore, Starostin does not specify whether or not he is using calibrated carbon dates. I have added 1000 years to his BCE dates on the assumption that he did not use the calibrated dates.
62. Hassan (1980, 437).
63. Ehret (2002a, 38).
64. Mellaart (1975, 22) and Blench (1999c, 6). Angel (1983).
65. Angel (1983).
66. See Trigger (1980) and Renfrew (1972, xxv).
67. Childe (1980).
68. For more on this, see Vol. 1, 71–3.
69. See, for instance, Bernal (1988).
70. Renfrew and Nettle, eds. (1999) and Renfrew, McMahon and Trask (2000).
71. Barbujani and Sokal (1990). I am grateful to the distinguished microbiologist Cyrus Chothia for this reference.
72. Cavalli-Sforza et al. (1988, 6005).
73. Ruhlen (1987, 161–2) and Bellwood (1991, 92).
74. Angel (1972 and 1983).
75. See Dolgopolsky (1987).
76. See Chap. 4, nn. 73–124 below.

Chapter 3

AFROASIATIC, EGYPTIAN AND SEMITIC

1. See Chap. 1, n.8.
2. Greenberg and Ruhlen firmly relate the northern languages Hadza and Sandawe to the Khoisan languages of southern Africa. See Ruhlen (1987, 117–9). See also Ehret (2002a, 122). For arguments against linking Khoisan languages even within southern Africa, see Westphal (1971). For a bibliography of scholarship on this debate see, Güldemann and Vossen (2000, 102). These authors propose a way out of the impasse: they suggest that the name “Khoisan” should be applied to any language in southern and eastern Africa that is not Bantu, Nilo-Saharan or Cushitic, without implying or denying the existence of any language family.
3. Bender (2000, 55) and Ehret (2000, 274).
4. For a history of the nomenclature of this language family, see Williamson (1988, 3–20). She sticks firmly to Niger-Congo. Williamson and Blench (2000, 11–42).

5. For Kongo-Saharan, see Gregersen (1972); for Niger-Saharan see Blench (1995), Williamson and Blench (2000, 16–7), Bender (1996), and Blench (in press a and b).
6. Blench (in press d).
7. Christopher Ehret (2000, 294), for instance, holds this view. See also, (2002a, 37 and 44–51).
8. Williamson and Blench (2000, 11–42).
9. Oliver and Fagan (1978, 359).
10. Bekele (1983) and Negassa (1985). I am grateful to Dr. Paul Powell for these references. See also Stemmler (1980, 504), Engels and Hawkes (1991, 24) and Engels (1991, 131). For the doubts, see Doggett (1991, 143). It is also possible that chickpeas, one of the staples of early southwest Asian agriculture, were also first domesticated in Ethiopia. Engels and Hawkes (1991, 33).
11. For a survey of the literature on early African crops, see Engels (1991, 131). See also Camps (1982, 571) and Barich and Hassan (2000). Harlan (1982, 639) refers to the finds of African millets and sorghum in late Second Millennium BCE sites in India. There are now finds of finger millet (*Eleusine coracana*) dating to the Third Millennium. Blench (2003) argues that, as these antedate evidence of domestication in Africa, this diffusion may have been without domestication. I find this difficult to accept. Others even believe that Indian millets derived from China [see the bibliography in Witzel (1999, 32)]. Witzel can find no etymological links between Chinese and Indian or African names. It is also possible that enset or “false banana,” the pith of which is processed and eaten, was propagated by cutting in very ancient times in much of Ethiopia. See Blench (in press c).
12. Munson (1976, 202). This is an overall picture; there were of course many local variations.
13. Bakker-van Zinderen (1976, 45–7), Camps (1982, 558), Clark (1978, 61), David (1976, 229), Phillipson (1993, 109), Sutton (1974, 527–8), and Wendorf and Schild (1976a, 273).
14. See Camps (1982, 620–1).
15. Chamla (1968), Mori (1965), Muzzolini (1986), Camps (1982, 579) and Ehret (2002a, 66–7).
16. Arkell (1949).
17. Sutton (1974, 536) and Phillipson (1993, 112–3).
18. See Ehret (2002a, 64). The Jōmon pottery in Japan may have been earlier.
19. Arkell (1975, 21).
20. Camps (1974, 269–70), Phillipson (1977, 46–7) and Sutton (1974). See further below.
21. Phillipson (1993, 113).
22. Brooks, personal communication, Buffalo (April 2002).
23. Blench (1997a). He has found parallels among Nilo-Saharan, Niger-Kordofanian, Afroasiatic and Khoisan. Speakers of the first three are present in the Sahara today and appear to have been there for many millennia. Khoisan speakers are not, but clearly they once existed far to the north and west of their present range. In this connection, it is also interesting to note the striking correspondence among the Afroasiatic *qurab “scorpion” [Orel and Stolbova (1995, 349 §1609)], the

- Spanish *carapacho* and French *carapace*, which both translate as the “shell” of tortoises, lobsters, etc. and the Teutonic *crab*.
24. Camps (1982, 555).
 25. Ibid., 566–7. He does not say how this date corresponds to uncalibrated years BP. In an earlier text he had claimed 7000 BC Camps (1974, 226).
 26. Clark footnote (1980, 571), and Barich and Hassan (2000).
 27. Phillipson (1993, 110).
 28. Camps (1982, 553, 555).
 29. Huyge et al. (2001).
 30. Camps (1982, 563). See also Butzer (1976, 10).
 31. Posnansky and McIntosh (1976, 183), Camps (1982, 564) and Phillipson (1993, 112). For pottery found in Tagalagal and other sites in Niger from the Tenth Millennium BP, see Mohammed-Ali and Khabir (2003, 45). The Eleventh Millennium dating from Saggai south of Khartoum is uncertain: Mohammed-Ali and Khabir (2003, 40).
 32. This use of the imperial name *Edward* is merely conventional. Its later name, Lake Idi Amin Dada, was abandoned after that dictator’s fall. The name Lake Mobuto Sese Seko, known imperially as Lake Albert, was abandoned after the fall of that Zairean tyrant.
 33. Personal communication, Shomarka Keita, Buffalo, N.Y., February 2002.
 34. Brooks et al. (1995) and Yellen (1995) and Yellen (1998).
 35. Yellen (1998, 196).
 36. Smith (1982, 380) sees a Moroccan harpoon as of comparable age to the Magdalenian. The Katanda and even the Ishango harpoons are considerably older.
 37. Phillipson (1993, 109).
 38. Yellen (1998, 190–6).
 39. Butzer (1976, 10).
 40. Phillipson (1993, 85).
 41. Ibid., 90.
 42. Camps (1982, 563).
 43. Smith (1980, 462).
 44. Grigson (1991) and Camps (1982, 570). There was also another domestication of cattle in India.
 45. Camps (1982, 582), Muzzolini (2001, 209–10).
 46. Wendorf and Hassan (1980, 417). Information on the period of rainfall came from personal communication, Barich and Hassan, Cambridge, July 2000b.
 47. Wendorf and Hassan (1980) and Barich and Hassan (2000a).
 48. Personal communication, Barich and Hassan, Cambridge, July 2000b.
 49. Sutton (1974).
 50. For the quibbles, see Phillipson (1993, 113).
 51. Sutton (1974).
 52. For doubts about the position of Songhai in Nilo-Saharan, see Ruhlen (1987, 111). Greenberg and he see it as in the macro-family. Ehret, however, has no doubt that it is a full member of the family (2001, 2).

53. Sutton (1974, 537 n.27).
54. Phillipson (1993, 107).
55. Flemming (1965, 61) points out that, while some West Cushitic (Omotic) speakers do have a taboo on fish, such a taboo is practically unknown among Nilotes and East Cushites.
56. Black (1974, 13–4), Sobania (1978, 92–3).
57. Ehret (1972, 26–54), Stemmler et al. (1975, 161–83).
58. Sutton (1974, 537). For Meroë, see Adams (1977, 294–423).
59. Ruhlen (1987, 377); Bender (2000, 56).
60. Arkell (1961, 52).
61. For “hippopotamus,” see Ehret (2001, 272 §76; 471 §703).
62. Arkell (1975), Adams (1977, 113–5).
63. Adams (1977, 112).
64. Greenberg (1965, 53) and Orel and Stolbova (1995, 338–9, §1557), and Takács (1999, 214–5). See also Vycichl (1983, 87–8).
65. Klein (1987, 595) saw the final -l as a suffix.
66. Gardiner (1957, 514, T: 21,22,23). The centrality of hippopotamus hunting to Egyptian culture can be seen in the myths of Horus’ struggle with Seth. Horus was a water monster usually a hippopotamus. Säve-Söderbergh (1953) and Störk (1982, c. 503). From this myth, these of Perseus and the water monster and St. George and the dragon can be derived through iconography.
67. Takács (1999, 213). He takes the Canaanite *šin* to be the Proto-Semitic sound. The attribution of this later Canaanite phoneme to Akkadian is shaky. Professor Gordon told me (Boston, September, 1994) that he accepted this interpretation merely because it was the Semitist tradition. Although there clearly are distinctions, it would seem more cautious to render the Proto-Semitic sibilant as /s/, thus bringing it into conformity with the rest of Afroasiatic. There is also the Berber *qrs* or *krs* “bind.”
68. Orel and Stolbova (1995, 339 §1560).
69. Job 40. 24; see Pope (1973, 328).
70. Cole (1963, 250).
71. Orel and Stolbova (1995, 324 §1485, 347 §1395).
72. For the equation of the Egyptian “vulture aleph”/3/ with the Afroasiatic /r/ and other liquids, see Chap. 8, nn. 25–33, below. I come back to *lrm* as a loan into Greek in Chap. 21, nn. 54–70.
73. Orel and Stolbova (1995, 139 §603). The final -b in *db* would seem to be a marker for dangerous or harmful animals, found throughout Afroasiatic. Diakonoff (1970, 461, n. 23), Takács (1994, 67). The concept of *db as a large dangerous animal may not be restricted to Afroasiatic. Takács (1999, 45) relates the Egyptian *db* to the Nilo-Saharan Proto-Rub (Kuliac) *dqb* “rhinoceros.”
74. Orel and Stolbova (1995, 139, §602).
75. Takács (1999, 243). He misses the Hausa form.
76. Orel and Stolbova (1995, 140, §608).
77. See n. 24 above.
78. Blench (1999b) in detail and Ehret more generally (2000, 285).

79. The list includes the following plants and plant products: items 51, 224, 265, 395, 544–559, 621, 727, 933, 958, 1111, 1167, 1210, 1212, 1364, 1443, 1634, 1499, 1652, 1706, 1727, 1817, 2235, 2270, 2390 and 2580. The following are domestic animals: 67, 112, 183, 310, 340, 896, 1077, 1100, 1432, (1632, 1635, 1643 and 1647= 2323), 1728, 1773, 1809, 1832, 1950, 2458, 2570, 2595, and 2660.
80. Diakonov's term "Afrasian," now preferred by Russian scholars, emphasizes the African component still more strongly.
81. See Militarev and Shnirelman (1988), Diakonoff (1991, 30) and Militarev (1996; 2000, 268). For Natufian, see Chap. 2 above, nn. 63–4.
82. Blench (1999b, 4). As we shall see, however, Blench has an explanation for the unity of Ancient Berber.
83. Bender (1975).
84. I shall argue in Chap. 4 that the gender system, widespread in Indo-European and generally accepted as secondary, was influenced by Afroasiatic.
85. See Cavalli-Sforza and Cavalli-Sforza (1995, 160–7). They are now supported by the linguist Vaclav Blažek (2002, 125).
86. I follow Keita (1992, 246–8; 1994) and Kittles and Keita (1999).
87. For the skeletal evidence, see Nurse et al. (1985, 105) and, for a bibliography on the genetic evidence, see Semino et al. (2002, 268).
88. McCall (1998). He maintains the same distinction for Indo-European.
89. Diakonoff (1996) and Takács (1999, 46). Earlier, however, Diakonoff appeared to accept the views of Militarev and Schnirelson who put the *Urheimat* in the Levant. Diakonoff (1991, 30).
90. Diakonoff (1965, 102) and (1996).
91. Diakonoff (1965, 104–5).
92. Newman and Ma (1966, 218–21).
93. Orel and Stolbova (1995, x). See Blench (1994, 6; in press c, 88–95).
94. The Cushiticist Gene B. Gragg, too, sees the *Urheimat* in this area or possibly across the Nile. Gragg (2001, 576).
95. Ehret (1996, 25; 2002a, 79–80).
96. Blench (2001a, 177).
97. Blench (2001a, 184).
98. Blench (1997, 27–9).
99. Blench (1994, 5).
100. Bender (1997a, 20).
101. Bender (1997b).
102. Bender (1997a, 22, 32). He also indicates that Egyptian shares the latter feature. As far as I am aware there is no prefix conjugation in that language.
103. Bender (1997a, 19–20).
104. Bender (1975, 202).
105. Bender (1975, 54–6).
106. The late Robert Hetzron did not accept Omotic as a branch of Afroasiatic. He saw it as a mixed language of Nilo-Saharan and Cushitic (personal comment, Princeton, N.J., Oct. 1988). Hard though it is to dispute the opinion of so great a

specialist, I prefer Bender’s views and those of most other experts. As mentioned in the last chapter, the /s/ causative is not merely Afroasiatic; it is found throughout the Nostratic family. The other two features are more restricted.

- 107. See Bender (1975, 219); Hudson (1978, 73–4); Ehret (1978); Hetzron (1978, 57) and Orel and Stolbova cited in Blench (1994, 6).
- 108. Bender (1997a, 22).
- 109. Oliver and Fagan (1978, 353).
- 110. Henrici (1973, 83).
- 111. Bender (1997a, 20) appears to accept this dating.
- 112. These are the following:

	Diakonoff	Bender	Total
Semitic	8.5	15	23.5
Berber	13.5	15	25.5
Egyptian	10	12	22
(Proto) Chadic	13	11	24
Beja	9.5	12	21.5
Awngi (Central Cush)	9.5	10	19.5
Sidamo (HEC)	9.5	11	20.5
Oromo (LEC)	9.5	12	21.5
South Cush	9.5	9	18.5
Omotic	9.5	4	13.5

- 113. Takács (1999, 36), however, follows Orel and Stolbova (1995) and Diakonov (1996) in stressing the “great mass” of Egypto-Chadic isoglosses.
- 114. Bender (1975, 143). It should be remembered that, as Ringe (1995) points out, these low percentages are similar to those within Euroasiatic and Nostratic.
- 115. Parson’s dissociation of Hausa from Chadic seems unlikely. Parsons (1975, 421–58).
- 116. The families are Omotic, East Cushitic, Central Cushitic, and Semitic. Beja and South Cushitic are not far away. Blench (personal communication, Cambridge, January 2001b) argues that Chadic must have started its trajectory from central Sudan. I cannot see any indication of this origin from the present locations of Chadic languages.
- 117. See n. 37, above.
- 118. See n. 2, above.
- 119. Sands (1998, 163–6). I am grateful here to Christopher Collins for providing me with the necessary references and to Roger Blench for encouraging me to pursue this line of research.
- 120. Blench (1999a, 4). He has now (2002c, personal communication) constructed a new *Sprachbund*, including Hadza, Sandawe, Ik and Dahalo. He calls it “Hadzic” and he sees it as influencing Proto-Afroasiatic.
- 121. Ehret (2002a, 122). This is also the tentative opinion of George Starostin (2003, 124).
- 122. Sands (1998, 94).

123. See Miller-Ockhuizen (2003, 5–9; personal communication, Cornell University, February 2004).
124. Greenberg ([1978] 1990, 252–9).
125. Flemming (1976, 316); R. A. Hudson (1976, 107).
126. Sands (1998, 100). Hagman (1977, 41–5). Nama has a common gender, however, it is closely associated with indefiniteness. For a discussion of the links between gender and definition, see Greenberg ([1978] 1990, 253–6).
127. These are *jn* “beautiful,” *w* “one,” *tm* “do not,” and *b* “wild dog.” See Takács (1999, 41, 45).
128. Güldemann and Vossen (2000, 108).
129. See Creissels (2000, 251).
130. Professor Christopher Collins has discovered traces of a class system, very unlike that of Bantu, in Ju|’hoansi (personal communication, Cornell University, November 2001).
131. The three way—masculine, feminine, neuter—gender system found in the Niger-Congo language of Defaka, spoken in the Niger Delta, is clearly secondary. See Blench (2002c).
132. Greenberg (2000, 185). In an earlier piece, Greenberg referred to a small number of examples of sex-linked gender systems in Austroasiatic, Australian and Amerind languages. ([1978] 1990, 241–70).
133. See, for instance, Andersson and Janson (1997, 145).
134. Elderkin (1976, 297).
135. See n. 88, above.
136. For a brief description of Dahalo, see Elderkin (1976, 290–5). Blench (2002c) classifies it as “Hadzic.”
137. Ehret (1996, 15) argues that the weakness of gender among Omotic languages and the existence of South Cushitic singular-plural markers indicate that in “pre-Proto-Afroasiatic” there was no sex-gender. He admits, however, that particular paired sets of South Cushitic markers “tended to go with either masculine or feminine nouns.” I believe that in this case it is difficult to distinguish between an ancient substratum and later influences. We know that Omotic was affected by its Nilo-Saharan-speaking neighbors. It is extremely likely that the South Cushitic languages have been influenced by the Nilotic- and Bantu-speaking peoples who surround them.
138. Takács (1999, 38–46).
139. Ehret (2002a, 121).
140. See n. 87, above.
141. See R. A. Hudson (1976).
142. Blench (1999b).
143. See Takács (1999, 47).
144. Simeone-Senelle (1997).
145. Ullendorff (1971, 30).
146. See Ehret (1995, 67–70).
147. For a splendid illustration of this principle of expansion of the biliteral $\sqrt{\text{pr}}$ in Akkadian, see Kienast (2001, 67).

148. This date is given by Trigger (1982, 495). On p. 500 he gives 9000–6500 BC(E).
149. For a climatic map of Africa in this period, see Ehret (2002a, 60).
150. Takács (1999, 47–8).
151. Camps (1982, 571–82). See also Hoffman (1991, 144) and Kindermann, (2000). Hassan (1988) sees the aquatic civilization more as a mixture of Nilotic and Saharan elements.
152. For this and a bibliography, see Keita (1990, 45).
153. For the existence of a Nubian state before that of Upper Egypt, see Williams (1980; 1987).
154. Wendorf et al. (1998).
155. For the dates, see Grimal (1992, 51–2). (He mistakenly writes 4323 instead of 4233). For the orthodox reluctance, see Gardiner (1961, 67–8).
156. For the dates, see Grimal (1992, 51–2).
157. Grimal (1992, 51–2).
158. Hoffman (1991, 172–81) and Kemp (1991, 43–4).
159. Keita (1992, 248–9). The date is mine not his.
160. Blench (2001b) made this interesting suggestion. While Chadic is tonal with a large number of consonantal homonyms, he made the typological argument that tonal languages are less likely to develop purely phonetic scripts because tones are not as easy to represent visually. The clearest examples of these are Chinese and Maya.
161. For arguments in favor of this chronology, see Volume 2, 213–4.
162. Keita (1992, 252–3).
163. Breasted (1908, 119).
164. Greenberg ([1986] 1990, 517).
165. Takács (2001, 1–2).
166. Takács (1999, 33–4).
167. Greenberg ([1986] 1990, 518). His argument, taken from Vycichl, that the ancient Egyptian used for the first hieroglyphs lacked an /l/ seems confused. As I have argued above, I believe that in Semitic the shift was n>l not vice versa.
168. *Wall Street Journal*, Dec. 16, 1998.
169. Rössler (1964; 1981) and Rendsburg (1981a, 675).
170. Cooper (1973).
171. As an isolate, see Ruhlen (1987, 377); as Austroasiatic, see Diakonoff (1997). As Nadene, see Bengtson (1997). For a relation of Nostratic, see Bomhard (1997).
172. For classifying in East Semitic, see Faber (1997, 7). For classifying in Northwest Semitic, see Dahood (1981a and b) and Gordon (1988).
173. For the archaism of the phonology of “Outer South Ethiopic,” see Bernal (1981). For a description of that phonology, see Hetzron (1997, 536).
174. For a discussion of this ambiguity, see Moscati et al. (1969, 13–4). For Arabic as distinct, see Faber (1997, 6).
175. For the acceptance of Ugaritic as a Canaanite language, see Harris (1939, 11). Faber states that this is the general opinion, although she herself sees Ugaritic as “rather a Northwest Semitic sibling of Canaanite” (1997, 10–1).
176. Young (1953), Gordon (1957) and Rendsburg (1981a, 668–70). Rendsburg argues that the Hebrew consecutive tenses were “used solely for the written dialect.”

- In other words they were fancy “Egyptianisms.” In a personal communication, Rendsburg (2001) doubts Gordon’s claim (1988, 262) that this form can be found from Ebla.
177. Klein accepts this and Vycichl (1983, 272) does not object. For the derivation of the Greek *heloimos* “ready, realized” from Egyptian or Canaanite passive participle *ḥâtum/ḥatum* “sealed,” see Chap. 14, n. 10.
 178. See Ellenbogen, Černý and Klein. Vycichl follows Fronzarolli (1972, 251) in denying this because of the attestation of *abīyanum* in this sense in a text from the Syrian city of Mari. The idea of an Egyptian loan into Amorite does not seem impossible to me.
 179. Klein derives it from the Egyptian *ms* “to carry.” I prefer the semantics of *msi*.
 180. This seems closer than the usual Semitic etymology from *dyn* “judge.” Klein is tentative about this. Brown, Driver, and Briggs (1953) derive it from ^ʔdn “to be strong.” The Greek Adonis is generally derived from ^ʔādōni “my lord.” I believe that the Roman name Antonius has the same origin.
 181. See Hoch (1994, 6, n. 16).

Chapter 4

THE ORIGINS OF INDO-HITTITE AND INDO-EUROPEAN AND THEIR CONTACTS WITH OTHER LANGUAGES

1. This was confirmed statistically by Ringe et al. (2002, 87, 97).
2. See above Chap. 1, nn. 30–1.
3. For a discussion of this connection, see Vol. 2, 218–22. See also Winlock (1921), Von der Osten (1927) and Allen (1927). The revised figure of 2000 as opposed to 1900 BCE comes from a recent report: Kuniholm (2001, 29) and Manning et al. (2001).
4. See Mallory (1989, 30–1).
5. See Macqueen (1975, 28).
6. Mellaart (1958, 10).
7. Mallory (1989, 222–8).
8. Drews (2001, 261) brings this out well.
9. For the great internal differences within the Anatolian family, see Gamkrelidze and Ivanov (1995, 758–9, n. 2) and Drews (2001, 257). For a sketch of these differences see for such linguistic problems. Mallory (1989, 27–8) is willing to consider the “possibility” of an entry in the later Fourth Millennium, although he cannot find an archaeological match.
10. Renfrew (1987, 168–70) and Gamkrelidze, and Ivanov (1995, 791–852). Recently, Renfrew’s view of the *Urheimat* in central Anatolia has been reinforced by a new glottochronological scheme requiring 9000 years, proposed by the New Zealanders Gray and Atkinson (2003).
11. See Thissen (2002, 81).
12. Gamkrelidze and Ivanov (1995, 621–41).
13. Ibid. This is not so clear as they suppose because there is an Afroasiatic root, *g^(w)ol to “go around.” Orel and Stolbova (1995, 214 §948).
14. Gamkrelidze and Ivanov (1995, 637) illustrate their case with a chart made by

- Gordon Childe in 1954. I do not think that later finds have seriously altered the distributional pattern.
15. See Thissen (2002).
 16. Gamkrelidze and Ivanov (1995, 791–3, 807–8).
 17. Ibid., 808–11, 836–41.
 18. Ibid., 794–803. These went in both directions. It should also be noted that many could be later loans. I question the exclusive relationship between Greek and Armenian in Chap. 7, nn. 7–73.
 19. Gamkrelidze and Ivanov (1995, 805–6).
 20. Ibid., 806. This is also the central theme of Marija Gimbutas's scholarship. See, for examples, 1970 and 1973.
 21. On the other hand, relatively few isoglosses separate Balto-Slavic and Iranian. See the chart in Mallory (1989, 21).
 22. Gamkrelidze and Ivanov (1995, 762).
 23. Chap. 2, nn. 68–70, above.
 24. Gamkrelidze and Ivanov (1995, 838–9).
 25. Renfrew (1999b, 9–11). Earlier, he had also entertained the alternative possibility that Indo-Aryans had spread directly from eastern Anatolia (1987, 205–10).
 26. Gimbutas (1973, 166).
 27. Goodenough (1970).
 28. The Semitic connection was published with great courage by H. Siegert under the Third Reich, in Siegert (1941–2).
 29. Szemerényi (1964a, 1–13).
 30. See Zimansky (2001). Such an ethno-genesis does have parallels in other cultures. The Magyar Hungarians appear to have been moved to their present homeland by the Khazar Empire. See Toynbee (1973, 454).
 31. Mallory (1989, 21).
 32. Gamkrelidze and Ivanov (1995, 839).
 33. For the lack of terms for wheeled transport, see Darden (2001, 187).
 34. Gamkrelidze and Ivanov (1995, 426).
 35. For the Indo-European, see Gamkrelidze and Ivanov (1995, 426). For the Afroasiatic, see Kammerzell (1994b, 28–9), Orel and Stolbova (1995, 425 §1988) and Takács (2001, 393–4).
 36. Gamkrelidze and Ivanov (1995, 778). Roots are given according to the reconstructions of the author cited. Gamkrelidze and Ivanov and Bomhard and Kerns (1994) follow the glottalic theory, while Pokorny was working in his variant of the traditional system. Pokorny (1959, 80) sets this root under *aḡ(e)-, aḡed-, aḡer- leading to the Hittite *wa-a-tar* “water.” Bomhard and Kerns (1994, 607 §483) list a Nostratic root *wat-/ʷwət.
- I do not accept Gamkrelidze and Ivanov's including the Greek *aisa* “lot” under *ai (Pokorny does not either) as it is much more plausibly derived from the Egyptian *isw* “reward” Coptic *asu* or *esu*. See Chap. 12, nn. 3–6.
37. The capital H is the conventional sign for a PIE laryngeal of unknown quality. The small elevated ^[h] after a stop indicates a phonetic but non-phonemic alternation of aspiration and nonaspiration. This is discussed further in Chapter 5.
 38. Gamkrelidze and Ivanov (1995, 779).

39. The same is true of the Uartian *pari/e* “move up to, toward.”
40. Bomhard and Kerns (1994, 567–8 §434).
41. Ibid., 540 §397. Raimo Anttila’s (2000) detailed study of the PIE root *ag/ is a perfect example of Indo-Europeanist tunnel vision. He does not consider the wider picture of its origin, although he looks for Indo-European loans into Finnish.
42. Gamkrelidze and Ivanov (1995, 779).
43. Chap. 3, nn. 10–1.
44. Dolgopolsky (1998, 27–8 §18).
45. Bomhard (1999, 54).
46. Gamkrelidze and Ivanov (1995, 770). See n. 88 below, for my skepticism about this etymology.
47. See Orel and Stolbova (1995, 281 §1272, 300 §1372) for the related root *h₂und.
48. Greenberg (2000, 22) and Blažek (1992). Of course, some of the Kartvelian loans could be from Akkadian spoken by Assyrians who we traded in eastern Anatolia and the Caucasus. They could also have come from Egyptian if we accept the traditions of Sesostris’ expedition into Kartvelian-speaking territory. See Vol. 2, 228–30.
49. Dolgopolsky (1998, 45 no. 43) *diqa “goat” and Bomhard and Kerns (1994, 198 no. 4) *bar/bər “to swell puff up.”
50. Mallory (1989, 151).
51. Proto-Kartvelian speakers could have contacted PIE speakers northeast of the Black Sea in regions where the Kartvelian language Mingrelian has been spoken.
52. Bomhard and Kerns (1994, 423 §266).
53. Orel and Stolbova (1995, 319 §1460).
54. For the pronunciation of /3/ as r/l, see Chap. 8, nn. 22–6.
55. In addition, the Egyptian earth god Akr is already attested in the *Pyramid Texts*. This would seem to be a rare example of the Egyptian /3/ being sounded from the beginning as an >aleph. See the discussion in Takács (1999, 273–5).
56. Bomhard and Kerns (1994, 498 §346).
57. Gamkrelidze and Ivanov (1995) base their claim on Nehring (1935) which appeared before the work of Bernhard Karlgren. Karlgren established the reconstruction of earlier Chinese on a systematic basis. His work does not have a form *kuo *ngiēu. The modern *niu* “cow, ox” is listed by him (1964, 262 §998). This form, however, is what Karlgren calls the “ancient form,” from *circa* 600 BCE. The earlier “archaic form,” reconstructed with less certainty, has a final -g: *ngiüğ. This would indeed make it closer to the Sumerian *Nu[d] (=gud, gu).
58. Gamkrelidze and Ivanov (1995, 492).
59. Chap. 3, n. 44.
60. Orel and Stolbova (1995, 203 §896).
61. Orel and Stolbova (1995) distinguish two renditions of this, la> (1632) and ša< (2323). For *na, see Blench (1993b, 73).
62. This final is similar to that in Sumerian and Archaic Chinese (Karlgren’s terminology).
63. Ndigi (1997, 158). The /ng/ sound is also found in South Bantu, see, for instance, the Cinyanja *ngombe* “cow, bull.”
64. Orel and Stolbova (1995, 396 §1832).

65. See Mainz (1993, 82) and Bilolo (2001, 65).
66. Dahood (1981b, 282).
67. Dahood's hypothesis (1981b, 282) that $\sqrt{kpr}$ was a ransom *kōper* (of copper) leading to *kipper* "atone" (as in Yom Kippur) is far-fetched but possible. Helck (1979, 125) argued that the Linear B *kuparo* referred to henna.
68. Pace Waetzoldt (1981, 366).
69. See Gamkrelidze and Ivanov (1995, 618, 773). Pokorny (1959, 86–7) does not have this root. He associates *auso "gold" with *aues "light, morning." Gamkrelidze and Ivanov's final-k^[h] is hard to justify. Another example is that in Chinese the same word *kjem (later *jin*) is used for both "gold" and "metal."
70. Mallory (1989, 121) accepts the first proposition but is uneasy about the second.
71. See Mallory (1989, 120). For the ideological background of Indo-European studies see Vol. 1, 308–99 and this volume Chap. 1.
72. See Lewy (1895, 4). For a detailed study, see Levin (1995, 13–27). Gamkrelidze and Ivanov's proposals are listed in their work (1995, 769–73).
73. Gamkrelidze and Ivanov (1995, 769 and 439). Levin (1995, 28) is clearly uncertain about the direction of the loan since he writes that it shows "that the prehistoric evolution of IE was not isolated from Semitic." Dolgopolsky does not claim *tawr as Nostratic and had previously listed it as a loan from Semitic into PIE (1987, 2).
74. For the first conventional interpretation, see Moscati et al. (1969, 43–5). For the opposing view see Bomhard and Kerns (1994, 95). Bomhard sees the aspiration as initially not phonemically distinctive.
75. Dolgopolsky (1998, 48, no. 49). He had earlier (1987, 2) seen it as a loan between Semitic and European.
76. Cohen (1970–76, 2: 100–1) and Levin (1995, 116–7).
77. Chang (1988, 38), Levin (1995, 116–7). This is puzzling; *jiēyang* is "castrated ram." The character *jiē* "castrate" with a "sheep" radical is not included in Karlgren's series, § 313, which has a number of different values for the archaic forms with the same "phonetic" *k_i at *k_iāt with final outcome *jiē*. None of these correspond to Chang's form, but any of them could correspond to *g^[h]ait. "Sheep" may indeed have been the original meaning with the sense of "castration" arising through confusion with another root with final pronunciation *jiē* "castrate."
78. For the archaeological evidence, see Pearson (1983, 120–3). The Jiegu were a tribe associated with the Xiongnu or Huns. With another radical the name *Wujiē* appears to refer to a neighboring people whom Pulleyblank (1983, 456) identifies with the Uighurs. It also appears to have been the name of a tribe generally associated with the Xiongnu.
79. Levin (1995, 105–6) reconstructs a labiovelar/g^w/ "in the background" of the PIE form.
80. Dolgopolsky does see a Nostratic root (1998, 47, no. 47), *jir(i)* "young male animal" which could possibly be related. For the Afroasiatic root, see Orel and Stolbova (1995, 247 §1100).
81. Gamkrelidze and Ivanov (1995, 769).
82. See Chap. 2, n. 36. Western Gurage has the form *gāngār* [Leslau (1979, 3: 273)], showing once again how easy it is to slip from /l/ to /n/ and vice versa.

83. Gamkrelidze and Ivanov (1995, 113). See Chap. 5, nn.33–4, below, for a discussion of the nature of the emphatic stops in Indo-European.
84. Orel and Stolbova (1995, 56 §224).
85. See Chap. 2, n.51 and Bomhard and Kerns (1994, 219 § 24).
86. Cohen et al. (1993, 4: 250) write that the forms in Beja and Agau are loans from Semitic.
87. Dolgopolsky (1987), also, sees it as a loan from Semitic to PIE.
88. For Dolgopolsky's hypothetical Nostratic root *cant see n. 44, above.
89. Pokorny (1959, 40). Also see Chap. 10, nn. 5–9, below.
90. Möller (1911, 99).
91. Bomhard and Kerns (1994, 502 §351).
92. Ibid., 497–8 §345.
93. Levin (1995, 104–5) is convincing when he suggests that the /u/ in *gurn represents the labiovelar g^w found in the Germanic “quern” and the Celtic *breuan*. He sees the loan as being from Indo-European to Semitic rather than the other way around.
94. Gamkrelidze and Ivanov (1995, 771).
95. See Takács (2001, 109–10) and Bomhard and Kerns (1994, 657 §535).
96. Karlgren (1964, 114 §405r).
97. Obenga (1993, 330 §84).
98. Bender (1996, 80 § ss24).
99. Witzel (1999, 59).
100. Even before that they may have wondered about the Aramaic *ṣilqā*. A Sumerian word for “ax” is *balag*, which is clearly related to the Akkadian *pilaqu*. The loan direction must be from Semitic to Sumerian as plg/q is so deeply rooted in Afroasiatic.
101. See Muss-Arnolt (1892, 85) for a nineteenth-century bibliography on the subject. See also Mayer (1960b, 350–1). Related roots √png “split” and √pnq “sluice” exist in Egyptian with cognates elsewhere in Afroasiatic. See Takács (2001, 450–2). Orel and Stolbova (1995, 416 §1938) reconstructs an Afroasiatic root, *pal “cut divide.” They specify (423 § 1979) *pilaq “knife.” Bomhard and Kerns (1994, 230–1 §35) see plg/q as extensions of a Nostratic root *p^[h]il’- *p^[h]el’- “split, cleave.” None of them mentions the Egyptian or Sumerian forms. In this general context, Mallory’s dismissal (1989, 150) of this “comparison that simply will not go away” as a mere “wander word” clearly illustrates his ideological position.
102. Gamkrelidze and Ivanov (1995, 620, 771).
103. It is also possible that *sekyra* was borrowed from *secūris*.
104. See Brown, Driver and Briggs (1953) and Klein (1987).
105. Bomhard and Kerns (1994, 409 §248).
106. As Vycichl explains (1983, 136), the boat determinative indicates that the basic meaning was to navigate on water.
107. See Orel and Stolbova (1995, 399 §1850).
108. Möller (1911, 141–2).
109. Bomhard and Kerns (1994, 277–8 §92).
110. Gamkrelidze and Ivanov (1995, 591–2, 772).
111. Gamkrelidze and Ivanov (1995, 772, n. 14).

112. Brown (1995, 339).
113. Möller (1911, 227), accepted by Mallory (1989, 150).
114. Gamkrelidze and Ivanov (1995, 772).
115. Möller (1911, 217).
116. Pokorny (1959, 1044).
117. See for instance Leslau (1979, 3: 536) and Szemerényi (1960b, 79–146). Strangely, Szemerényi (1978) maintains, on the basis of the Armenian form *weks*, that the PIE form was *weks* and the initial *s-* was only added by analogy with **septm*. The conventional **sweks* is far more plausible.
118. Levin (1995, 405–7).
119. Nussbaum (1986). See also the discussion in Bernal (2001, 112, 411, n.17).
120. Even if they are right, the significance of Nussbaum's omission is not lessened.
121. For a bibliography on this, see Levin (1995, 29).
122. Orel and Stolbova (1995, 337 §1552).
123. Ibid. Hoch (1994) does not list this among his Semitic loans into Late Egyptian.
124. Ivanov (2001, 146) derives the term from a common Semitic root $\sqrt{\text{sl}}$ "powerful."
125. See the scheme set out in Thomason and Kaufman (1988, 74–6).
126. See Chap. 2, nn. 35–6.
127. Greenberg (2000, 153–4).
128. For the Egyptian, see Loprieno (1995, 56) and, for the Semitic, see Gordon (1997, 108). Moscati et al. (1969, 94) argue for a short "i" and Levin (1995, 127–9) argues for a long $\bar{\text{i}}$. For the probable association between the genitive and the *nisba*, see Kienast (1981, 90). In Beja, the genitive suffix is "i" or "ii"; Hudson (1976, 109).
129. Hockett (1958, 231), quoted in Corbett (1991, 1).
130. The "common gender" in Danish and Swedish is the result of the merger of the masculine and feminine. Icelandic and the Norwegian Nynorsk, however, preserve all three of the original genders—masculine, feminine and neuter.
131. Gamkrelidze and Ivanov (1995, 255).
132. Brosman (1982, 253–4). Gamkrelidze and Ivanov (1995, 245–6). They refer to **aH>â*. As Szemerényi points out, (1985b, 20; 1987, Vol. 1, 415), it can be misleading to postulate laryngeals where there is no evidence of them in Hittite.
133. Brugmann (1897). This is Brosman's summary (1982, 254) of Brugmann's argument.
134. Miranda (1975, 203) cites a personal communication from Maurice Cowgill finding no parallel case of "childbearing" leading to "woman" and no language lacking a word for "woman." Miranda himself supports Brugmann.
135. Brugmann (1897, 27).
136. See, for instance, Lehmann (1993, 152–3).
137. Brosman (1982, 260–1). Gamkrelidze and Ivanov (1995, 245–6).
138. For a bibliography on this, see Brosman (1982, 254).
139. See Brosman (1982, 259); Szemerényi (1985b, 19; 1987, 1: 414).
140. Weinold (1967); Dumézil (1958). There is a good summary of Dumézil's position on this in Mallory (1989, 131–5).
141. Miranda (1975, 212).
142. Brosman (1982).

143. Lehmann puts it this way: “the -h was lost as a consonant before gender was introduced as a grammatical category” (1993, 152).
144. Szemerényi (1985b, 19–20; 1987, 1: 414–5).
145. Szemerényi (1985b, 19; 1987, 1: 414). Another Hungarian linguist, István Fodor (1959, 190), believed that the three-gender system was too ancient to be reached by comparative methods.
146. Fodor (1959, 19).
147. Ehret (1995, 27).
148. Moscati et al. (1969, 84–5); Vergote (1971, 51).
149. Loprieno (1995, 59). The last, if found in Semitic, would explain the -ṯ feminine forms in PIE and especially Indo-Iranian.
150. Buccellati (1997, 77–81).
151. Ibid., 76.
152. Loprieno (1995, 60). Interestingly, Prins in her detailed study insists that what are, according to her, conventionally called “neuter plurals” are better seen as collectives (1997, 249).
153. Vergote (1971, 51). Vycichl (1983, 289) reconstructs the final -wt in the same way; see under *hbsō*. Their reconstructions are now strengthened by analogies from Eblaite; see Garbini (1981, 79–80).
154. Moscati et al. (1969, 45).
155. Loprieno (1995, 38).
156. Harris (1939, 57–9 §§ 33–4; 67–8 §44).
157. For the dating of the Eblaite texts, see Vol. 2: 211–3.
158. Dahood (1981a, 180).
159. Gordon (1997, 103).
160. Fodor (1959, 4).
161. See, for instance, Lehmann (1993, 152).
162. Pedersen (1931, 14), Fodor (1959, 190) and Szemerényi, (1985b, 19; 1987, 1: 414).
163. Loprieno (1995, 60).
164. See Vol. 1: 12–3.
165. Szemerényi (1985b, 19; 1987, 1: 414).
166. Orel and Stolbova (1995, 329–30).
167. For the Uruk system, see Algaze (1993), Collins (2000) and Rothman (2001). For Karum Kanesh, see Vol. 2: 218–23.
168. Sherrat and Sherrat (1988).

Chapter 5

THE GREEK LANGUAGE IN THE MEDITERRANEAN CONTEXT: PART 1, PHONOLOGY

1. See for instance, Chadwick (1975, 805–18).
2. Wilhelm von Humboldt ([1836] 1988, 216), and Aarsleff, (1988, x and lxi–lxiv). See Chap. 1, n. 13, above.
3. Humboldt ([1793] 1903–35, 1: 255–81, esp. 266). See also Brown (1967, 80).
4. Humboldt ([1793] 1903–35), 3: 188.

5. Thomason and Kaufman (1988) and Jasanoff (1989).
6. Thomason and Kaufman (1988, 74–146).
7. As stated above, this is schematic and should not be taken literally. The actual pattern must have been very irregular both historically and geographically and probably many more generations were involved. I am grateful to Dr. Lori Repetti for this scheme.
8. Some of the few are referred to in Chap. 10, n. 7. This line from the “Road to the Isles” is actually from Scottish Gaelic, which in this case has the same construction as the Irish. Irish, by contrast to Irish English, is a good example of a contact language. While retaining its phonology, morphology and syntax, it is full of English and other foreign words.
9. When discussing this phenomenon Jasanoff and Nussbaum (1996, 184) cite the English and east Asian examples and add Iranian loans in Armenian and Arabic loans in modern Persian.
10. Humboldt (1988).
11. Since the semantic areas occupied by Greek loans in Coptic overlap with the non-Indo-European areas found in Greek, I believe that a high proportion of the Greek loans into Coptic had Egyptian or Semitic origins.
12. Blegen and Haley (1927).
13. Kretschmer (1924).
14. Blegen and Haley (1927).
15. Vol. 1, 48.
16. Jasanoff and Nussbaum (1996, 187). See Bernal (2001, 126–7).
17. For -nthos see below Chap. 10, nn. 1–85.
18. See Thomason and Kaufman (1988, 39–40 and 85–6).
19. See Trask (1996, 327–8).
20. Quoted in Thomason and Kaufman (1988, 65, 215–22).
21. Chantraine (1956, 12).
22. For the Swadesh list see Swadesh (1971, 271–84).
23. These are *ear*, *haima* “blood,” *osse*, *ophthalmos* “eye(s)” and *neos*, *kainos*, “new.”
24. See Thomason and Kaufman (1988, 365, n. 22). Similarly, a linguist has noted that “in written Vietnamese the words borrowed from Chinese make up approximately 70% of the vocabulary. In spoken Vietnamese there are considerably fewer words of Chinese origin.” Ngo (1999, 203).
25. Renfrew (1998a).
26. Finkelberg (2001) states that Linear A was specifically Lycian. This may be a case of misplaced precision, but the general argument that the basic language of Linear A was a form of Anatolian is convincing. See also Owens (1999).
27. The chief scholars with the relevant expertise are not merely such Semitists as W. Muss-Arnolt, Heinrich Lewy, Cyrus Gordon, Michael Astour, Saul Levin and John Pairman Brown, but also the classicists Walter Burkert and Martin West and the Indo-Europeanist Oswald Szemerényi. The only specialist Renfrew cited in the area of Semitic loans into Greek was Emilia Masson. For Masson’s extraordinarily restrictive list, see Chap. 7, nn. 20–2. The words Renfrew cites, which have strong Semitic or Semito-Egyptian etymologies, are *asaminthos*, *kados*, *kithara*, *xiphos*,

- pallakis*, *plinthos*, *sak(k)os*, *salpinx*, *sidê*, *sitos*, *syrinx*, *phorminx* and *khitôn*. See also Bernal (2001, 413–4, n. 59).
28. Vol. 2: 63–77, 361–408.
 29. Gordon (1966, 26–7). The loans include *qapa* Hebrew *kp*; *supu* Hebrew and Ugaritic *sp*; *karopa* Akkadian *karpu*, *supàru* Hebrew and Ugaritic *spl*; and *a-ka-nu* Hebrew and Aramaic ^ʔ*aggân*, all types of bowls. For a discussion on the reading of the Linear B *qa* see below, p. 223. There is also *kunisu* the Akkadian ku(n)nisu “wheat”; *yane*, *yayin* the Canaanite term for “wine”; *kireyatu qiryat* “city” and the frequent word *kuro* “total” the pan-Semitic *kol* or *kāl* “all.”
 30. See Chap. 8, n. 47, below.
 31. See, for instance, Lehmann (1993, 95). Previously, the Neo-Grammarians had proposed a four-way system with a series of unvoiced aspirates *ph*, *th*, *kh* and *k^{wh}* and a palatal series *k̂*, *kĥ*, *ġ* and *ġh*. These were later seen to be unjustified. See Bomhard (1981, 353–4).
 32. See Szemerényi (1967b, 88–93).
 33. Bomhard (1981, 355). For other attempts to get around the problems caused by the removal of the unvoiced aspirates, see Bomhard and Kerns (1994, 41).
 34. Summarized in Bomhard and Kerns (1994, 46). Lehmann (1993, 98) argues that glottalics do occur together in some “African” languages.
 35. See Mayrhofer (1983, 152) and Collinge (1985, 265) for examples of open-mindedness.
 36. For forthright opposition, see Dunkel (1981b) and Lehmann (1993, 97–100). For continuing traditionalism, see Jasanoff and Nussbaum (1996).
 37. Szemerényi (1985b, 4–15).
 38. Gamkrelidze and Ivanov (1995, 45).
 39. Starostin (1999b).
 40. Gamkrelidze, personal communication, Milan, Oct. 1999. Lehmann (1993, 98–9) is also skeptical about “Winter’s Law.”
 41. Starostin, personal communication, Milan, Oct. 1999. For Winter’s Law, see Collinge (1985, 225–7).
 42. Hopper (1973) and Gamkrelidze and Ivanov (1995, 5–70) *pace* Szemerényi (1985b, 398–410). For a discussion of the advantages and disadvantages of the newly proposed system, see Colarusso, (1981, 478–9) and Bomhard (1981, 466).
 43. Meillet (1936, 92–3).
 44. Levin (1971a, 54–101).
 45. Szemerényi (1964a, 16).
 46. Szemerényi (1964a).
 47. See Masica (1978, 1–2), Thomason and Kaufman (1988, 37–64) and Crowley (1992, 259–64).
 48. See Crowley (1992, 260).
 49. Dillard (1973, 5).
 50. Gordon (1957); Rendsburg (1981a). See also, Dietrich (1990).
 51. For canonical versions of the history of early Greek presented largely or completely in terms of internal developments and vague substrate influences, see Lejeune (1972), Chadwick (1975) and Palmer (1980, 3–82).

52. See Arapoyanni (1996). For the dates of attestation, see Driessen (1997).
53. For the survival in Armenian, see Sturtevant (1942 §22a) and Bomhard (1976 §5).
54. See Gamkiredze and Ivanov (1995, 131–83).
55. The unaspirated allophones of the voiced series II (b/b^h etc.), however, joined the emphatic series I to form the voiced stops. See Gamkiredze and Ivanov (1995, 51).
56. Gamkiredze and Ivanov (1995, 56).
57. Georgiev (1966, 149–52).
58. For Indo-Iranian and Italic, Gamkiredze and Ivanov (1995, 51, 65).
59. See Gragg (1997, 244), Kogan (1997, 425), and Simeone-Senelle (1997, 382–3).
60. See Steiner (1977).
61. Loprieno (1995, 38).
62. See Buccellati (1997, 83–4), Gordon (1997, 107–8), Kaufman (1997, 121–2), Pardee (1997, 133–4), Segert (1997, 176–7), Fischer (1997, 200–2), Kogan and Korotayev (1997, 224–5), Gragg (1997, 247) and Beeston et al. (1982).
63. An example of an apparent shift from s>h also exists inside Hebrew *šbr* “examine,” *šbr* “interpret dreams” and *hbr* “classify the heavens.” Possibly the two former were loans from Akkadian that had retained the initial s-. They could also have been taken from the Egyptian *sbʒ* “knowledge, star.” See Chap. 10, nn. 99–126.
64. The causative /s/ would appear to be Nostratic. Greenberg (2000, 200–2 §50) claimed it for Euroasiatic. In Indo-European there is the so-called *s-mobile* in which /s/ appears to have been added randomly at the beginning and end of roots. Conventional Indo-Europeanists do not quite know what to do with it. As Winfrid Lehmann expresses it, “the meaning of -s- in the late proto-language is difficult to determine precisely. It may have indicated completion or terminative meaning” (1993, 169). It seems likely that a major source of these forms is a causative /s/. See, for instance, the modern English “fall” and “spill,” “wipe” and “swipe,” “whirl” and “swirl,” etc.
65. Laroche (1958, 159–97; 1960, 155–8). See also Georgiev (1966, 229–30) and Gamkrelidze and Ivanov (1995, lxi).
66. Bernal (1990, 34–5).
67. Georgiev (1966, 190–4) and Szemerényi (1967a, 190–4).
68. Chadwick (1975, 808) and Szemerényi (1967a, 193).
69. For the early dating of Zoroaster, see Boyce (1975, 3, 190); Kingsley (1990, 245–65) and Burrow (1973, 136–7).
70. See Trask (1996, 58).
71. Meillet (1965, 22); Ventris and Chadwick (1973, 78); Lejeune (1972, 165–73). For the argument that signs of the change can be found in both Linear B and Homeric Greek, see Deroi (1974) and Nagy (1970, 101–51).
72. Meillet (1936, 44–5, 186).
73. Moscati et al. (1969, 45).
74. The great exceptions are *yôm* “day” and *yâd* “hand.” Below I will argue that *yâm* “sea” came from *m’am.
75. Moscati et al. (1969, 62) and Harris (1939, 43).

76. Loprieno (1995, 35). For a powerful argument that /i/ was always />/ see Hodge (1977, 930–4). See also Albright (1923, 67).
77. For Albanian, see Georgiev (1966, 163).
78. Bomhard and Kerns (1994, 100–1). I had independently arrived at the same conclusion; see Bernal (1981).
79. Moscati et al. (1969, 28).
80. Harris (1939, 40–1). Pace Moran (1961, 59), who puts it in the fourteenth century BCE. For the merger $d^y > z$ before the transmission of the alphabet *circa* 1600 BCE, see Bernal (1990, 67).
81. Meillet (1936, 73). For the ambiguity of the Mycenaean /s/, see Ventris and Chadwick (1973, 398–9). For a survey of the complexity of Greek dialects and a bibliography on the subject, see Dunkel (1981a, 132–41).
82. In Egyptian ꜥ was rendered *Dw3(wy)*. See Posener (1940, 82) and Helck (1962, 58). See the bibliography in Katzenstein (1973, 19). In Late Egyptian the initial letter would have represented a neutral dental [Loprieno (1995, 38)] and it is conceivable that the Greek Tyros was influenced by that.
83. Bomhard and Kerns (1994, 72) and Gamkrelidze and Ivanov (1995, 81–8).
84. Bomhard accepts them in Proto-Afroasiatic but denies them in Proto-Semitic. Bomhard and Kerns (1994, 97).
85. Nagy (1970, 125–51) and Lejeune ([1972] 1987, 101).
86. Pace Moscati et al. (1969, 33). See Steiner (1982).
87. For the dialectal variations of -ss/-tt-, see the chart in Lejeune ([1972] 1987, 106). For more on this and the letters used to represent *šade*, see Bernal (1990, 108–10).
88. This etymology was accepted by Gordon, personal correspondence Oct. 1998.
89. Georgiev (1966, 73).
90. Beeler (1981, 69).
91. Georgiev (1966, 231).
92. Gusmani (1964, 235–6, 241–2).
93. Georgiev (1966, 150).
94. Loprieno (1995, 38).
95. Harris (1939, 53, 58–9).
96. Wyatt (1972b, 1).
97. See Szemerényi (1964b, 224–40). For a survey, see Chantraine s.v. *ónoma*. See, also, Gamkrelidze and Ivanov (1995, 126–30). Wyatt (1972b, 4) denies that any laryngeals existed in PIE. He then (3–10) attempts to make fixed rules out of this general tendency. For the problems with this rigid type of approach, see Szemerényi (1973c).

“Name” may derive from a Nostratic root **in-im/?en-im*, as proposed by Allan Bomhard. He finds it in PIE, Proto-Uralic and Sumerian. He does not see it in Proto-Afroasian (1994, 687 §569). According to Orel and Stolbova, (1995, 485 §2304), the Afroasian root is **šüm*. The Central Chadic languages Tera, Gude and Gudu, however, have forms with initial *l-*. The authors explain these forms as an “irregular lateral resulting from the contamination with the word for ‘ear.’ This explanation is, in itself, improbable. What is more, Newman and Ma (1966, 237 §70) give the reconstructed Biu-Mandara regional form *dləm* and,

elsewhere, tēmi. This reconstruction would indicate a Chadic root **ɬm*. The argument that this root could be Afroasiatic is weakened by the fact that in Semitic the initial is s^l- not s²-, which is the usual descendent of /*h*/. Nevertheless, the possibility that **ɬm* was the Afroasiatic root makes a derivation from Nostratic **ʔin-im*/?*en-im* conceivable given the Afroasiatic tendency to reduce initial *n*- to *l*- and the extraordinary durability of the word “name.”

The situation is further confused by the Nilotic root *(*ka*)*rin*, which Takács sees as the origin of the Egyptian *rn* “name” (1999, 38–9).

98. Lejeune ([1972] 1987, 210–1).
99. Thomson (1966, 27–8) and Meillet (1936, 143).
100. Clackson (1994, 33–5). While not as skeptical as Clackson of a special genetic relationship between Greek and Armenian, Ringe et al. (2002, 103–4) see the relationship as less strong than that between Italic and Celtic. They conclude, “in sum though we think that Clackson has overstated his case in denying any evidence (for the connection) we readily admit that the evidence is disappointingly meagre.” The only exclusive parallel they can accept is for their reconstructed form *āmr* “day.” I argue below (n.108) that the Greek *hēmēra* is a borrowing from Egyptian and I assume that the Armenian term comes from the Greek.
101. Chap. 4, nn. 110–2.
102. A derivation from the Akkadian *ereb* “sunset” is not impossible given the analogy of the number of Irish words copied from the Latin *p*:- *Pascha* “Easter,” *purpura* “purple” etc. These result in Irish *c*- *Casc*, *corcur*. See Thurneysen ([1949] 1993, 570 §920). This analogy is, however, weakened by the fact that Irish of the time lacked a /*p*/ while Armenian possesses a /*b*/. Throughout the text letters or numbers in paragraphs will refer to the first known attestation of a word in Greek: (H) stands for a first attestation in the works of Hesiod or Homer—the earliest corpora of alphabetic Greek. A number in parentheses indicates the century BCE.
103. Sethe (1893) first proposed this idea for Egyptian. It was opposed by several later Egyptologists but revived by Hodge (1991). For Egyptian, see also Gardiner (1957, 209 §272). For Semitic, see Kienast (2001, 35).
104. Moscati et al. (1969, 60).
105. Meillet (1965, 19). The Armenian pattern could have been derived from the ancient Caucasian language, Urartian, but the predominant prothetic vowel in that language appears to have been *u*-. See Friedrich (1933, 68).
106. Onians ([1951] 1988, 412–5).
107. For a bibliography on this etymology see Chantraine.
108. The Egyptian *km* is also found in *kémó* in the West Chadic language of Pero and in the Proto-Bantu **-kom*- “to become finished.” See Takács (1999, 43).
109. This copy must be very early as not only is the /*ʒ*/ pronounced as a liquid but the /*ʃ*/ was rendered in Greek as *χ* reflecting the Egyptian shift of *ʃ* from *ḥ*. For more on this word, see Chap. 8 below, n. 63 and 66.
110. *Hbny* itself is probably a copy from a Congo-Saharan word.
111. For this principle see Gardiner (1957, 209 §272).
112. Černý puts forth the view of an Egyptian origin. Vycichl (1983), supported by Hoch (1994, 269 §383 and n. 59), challenges this view and proposes that the word is Semitic. He gives two grounds: one, that the root is found in Akkadian

and Ge'ez and, two, that the Egyptian sign 𓂏 /s/ is rendered as /s/ in Hebrew not as the /š/ found in *šaq*.

Despite these arguments, I accept Černý's hypothesis, partly because the Egyptian sibilant is uncertain. A word $\text{š}(š)q$ exists with the probable meaning "bag." More importantly, the proposed original form $\text{s}(š)q$ provides a suitable etymology for the Greek **σάρξ, σαρκός** (H) "flesh," the opposite of *psukhē* "spirit." Chantraine rejects the etymology from an Indo-European root **twerk-* "cut, part." Equally, he rightly denies the proposal made by Risch (1961) that it came from an Indo-European root found in the Avestan *θwarəxštar* "creator." Risch's argument that the original meaning of *sárx* in Greek was "giving form to something, or someone," seems more reasonable. As far as I am aware there is no early attestation of $\text{s}(š)q$ in this sense but in Coptic texts the *sarx* is frequently seen as being "worn" by the spirit. See for instance, the phrase *p̄genos n̄ n̄rōme n̄tauphorei n̄ tisarx* in *The Life of Joseph the Carpenter* Sahidic fragment 18.4 in Lamdin (1983, 196–208).

113. Chantraine describes the etymology of *askos* as *non établie*.
114. The Greek root appears to be **aspid*. The addition of -d or -t to two-letter roots will be discussed below in Chap. 14, n. 18. Chantraine sees no clear etymology for *aspis*. He also links the snake name to it on the grounds that its neck is curved when it attacks, preferring this suggestion to the idea of a loan from another language.
115. Diodoros, 1.28.4. See Chap. 22, nn. 163–6 below.
116. Burton (1972, 122). I cannot find *ist* on the page she cites from Gauthier (1925–31, Vol. 1, 104) though I have no reason to doubt her.
117. Wiedemann (1883, 2) denies that *astu* is from *ist*. Chantraine sees an initial w- and links it to the tentative Mycenaean form *watu* and the Vedic *vastu* "residence" (late), Tocharian A *wast*, Tocharian B *ost* "residence." Even so, Chantraine sees difficulties with the vowels. For the initial w- not creating problems for the Egyptian etymology, see Chadwick (1973, 79, 398) who points out that in several instances the initial digamma found in classical inscriptions is not justified etymologically.
118. For more on this see Chap. 7 below, nn. 93–4. For Beloch's attempts to separate the Rhodian title of Zeus, **Αταβύπιος**, from the mountain and any Semitic taint, see Burkert (1992, 34).
119. Harris (1939, 42).
120. Bryce (1976, 168–70).
121. Harris (1939, 43–4) and Loprieno (1995, 38–9). For a possible link between this and the breakdown of labiovelars, see n. 191 below.
122. Segert (1997, 176).
123. *Cratylus*, 400 B and C. A parallel for the alternation $\bar{\epsilon}/\bar{o}$ Kēphissos/Kōpais is discussed in Chap. 20, n. 90, below.
124. See below Chap. 13, nn. 14–6.
125. Vycichl (1983, 215).
126. Chantraine states that the name has been found in Mycenaean, without citing the form. It is not in Ventris and Chadwick (1973). Chantraine agrees with Frisk that the etymology is "unknown." For the origin of the suffix -eus from the Egyptian

- w suffix of agency, see Chap. 6, nn. 8–12. For more on the verb *ts*, see Chap. 8, n. 44. For more on *tsw*/Theseus see Chap. 22, n. 169.
127. See Stubbings (1975, 186–7).
 128. Sandys (1903–08, Vol. 2, 407–8).
 129. Chantraine ([1948] 1973, 153).
 130. Meillet (1965, 81).
 131. Chadwick (1973, 79, 398).
 132. Chap. 9, n. 10.
 133. For Eblaite, see Pettinato (1981, 67). For the situation in Ugaritic, see Gordon (1965a, 32).
 134. Loprieno (1995, 38).
 135. Dunkel (1981a, 139).
 136. Ehret (1995, 174–8).
 137. Bomhard and Kerns (1994, 467–500).
 138. Leslau (1979, vol. 3, xxxix). **ək*‘a seems remarkably similar to reconstructed Khoisan roots, *!kxoe and *!qha for “rain” and “water.” See G. Starostin (2003, 110–1). Neither root, however, appears in Hadza or Sandawe.
 139. Diakonoff (1970, 456, n. 9).
 140. Diakonoff noted (1970, 454, n. 10) that he had taken this bivocalism from Edwin Pulleyblank’s reconstruction of the Nadene languages Chinese and Northeastern Caucasian. Diakonoff maintained that the same structure obtained in North-western and Southern Caucasian and is analogous to the Indo-European base of **o* and **ə*.
 141. Diakonoff (1970, 466).
 142. See Pettinato (1979, 68; 1981, 60).
 143. Gardiner (1957, 53). Egyptian independent pronouns had no case.
 144. Gordon (1997, 107).
 145. Ryckmans (1960, 30).
 146. Moscati et al. (1969, 104).
 147. Hetzron (1997, 540).
 148. Leslau (1979, vol. 3, 369, 372).
 149. See Jakobson and Waugh (1990, 301–4).
 150. Ehret (1995, 14).
 151. This is not to say that the Semitic nominative pronouns of the type >*anta*/>*anti* are secondary. The endings *-ta* and *-ti* have a plausible Nostratic root. See Bomhard and Kerns (1994, 285–7) for a bibliography.
 152. Hetzron (1978, 59); Hudson (1997, 462) sees it merely as *ank*.
 153. Ryckmans (1960, 20–1).
 154. Diakonoff (1965, 34).
 155. Moscati et al. (1969, 167).
 156. Harris (1939, 30).
 157. Frisk requires a metathesis **kov*--*yoç* from a hypothetical **κομ*--*yoç* linking it to the Latin *cum* “with” or a speculative proto-Greek **kon* “with.” Chantraine sees Frisk’s first hypothesis as the traditional one but also speculates that the root is **kei* and links it to the Homeric *κείων* “cleaving” which he extends to “sharing.” He also considers “further off” the Sanskrit *śéva* “friendly, dear.”

158. Chap. 9, n. 21–5. For examples of C*V>Coi, see Phoinix, Chap. 15, nn. 34–43, and Moira, Chap. 10, nn. 162–3.
159. See Gardiner (1947, 1: 150). I am grateful to Dr. Scott Noegel for having pointed out the /3/ in the name. For the Eighteenth Dynasty form, see Sethe Helck (1906–9, Urk. IV, 1344.5).
160. See nn. 169–75, below.
161. Albright (1950, 166). See also Vol. 1, 57. Gubla/Biblos was not the only Levantine city name indicated by sound shifts to have been known to Greeks before 1500 BCE. Tyre has been discussed above (see n. 81). For Gaza, which came from Canaanite before /ǵ/merged with /ʾ/ in the fourteenth century BCE, see Harris (1939, 40–1 §13.) The Hebrew toponym is ʾazzâh.
162. Cohen (1933, 34–5). Possibly, the Linear B form *rawageta*, λαγέτας in Dorian, “leader of people” comes from this rather than from an ill-defined form of *λαός* ἀγέομαι. For a discussion of a possible Semitic origin for *laós*, see Chap. 13, nn. 49–52.
163. Vol. 1, 57–8. Brown (1995, 58) appeared to accept my proposal. In later work (2000, 302), however, he described the Semitic origin as “more speculative.”
164. Levin (1971a, 481).
165. M. Cohen (1933, 34).
166. Kretschmer (1927, 240).
167. Another example of a Semitic word introduced before the breakdown of the Greek labiovelars *qʷälläfä* > *delph-* will be discussed in Chap. 19, n. 142.
168. Chap. 10, nn. 86–93.
169. Fecht (1960, §176) and Osing (1976, 348).
170. Vycichl (1983, 74).
171. Vycichl (1983, 77).
172. For *kurîi/karati*, see Hoch (1994, 333–4 §486); for *kurakura/karakara*, Hoch (1994, 335 §491); for *kumaru/kamaru* see Vycichl (1983, 77) and Hoch (1994, 320–1 §462).
173. See Hoch (1994, 422–3 §465).
174. See *ibid.*, 328 §475.
175. Černý (1976, 69) and Leslau (1979, Vol. 3, 359).
176. Elderkin (1976, 291).
177. Gardiner (1957, 53). It bears repeating that Egyptian independent pronouns have no case.
178. Gordon (1997, 107).
179. Ryckmans (1960, 30). I have argued elsewhere (1990, 102) that the Akkadian sibilant conventionally transcribed /š/ should just as well be seen as /s/.
180. Moscati et al. (1969, 104).
181. Hetzron (1997, 540).
182. Leslau (1979, 3).
183. See Hoch (1994, 256–7, 275 §§ 360–1, 392).
184. See Segert (1983, 202, 215) and Bernal (1990, 105).
185. Leslau (1950, 54–5); Shack and Habte (1974, 26) and Bernal (1990, 45). The root √bzz as a possible cognate of the Egyptian god Bes is discussed in Chap. 11, nn. 26–30.

186. Kings 7.21. The *ʿayin* would ensure a rounded pronunciation.
187. Gelb (1957, 167).
188. Chap. 10, nn. 159–68.
189. See Gardiner (1957, 61) and Callendar (1975, 13). See also Chap. 12 below, nn. 32–5.
190. The possibility of rounded dentals will be considered below in Chap. 14, nn. 9–10.
191. Hesiod, *Theogony* 1.149.
192. The obvious Canaanite connections led Lewy (1895, 151, 210) to propose this etymology. Masson attempted to deny it, as did Chantraine; both with great implausibility.
193. Chap. 9, nn. 58–81.
194. Meillet (1964, 91–5) and Bomhard (1981, 391).
195. For Lydian, see Bomhard (1984, 97). Szemerényi (1966b, 39–40) is clearly attracted to the idea that the tendencies to labialize labiovelars in both Lydian and Aeolic were spoken in adjoining territories. He points out, however, that since labialization took place before different vowels and stresses reconstructing Lycian and Lydian is full of great uncertainties. I would add that to a lesser degree the same is true of Greek. For instance, three of the four possibilities he gives for *kʷi>ti*—*tisis*, *tima* and *atimos*—have plausible Egyptian etymologies and nothing to do with Indo-European labiovelars. See Chap. 9, nn. 188–91, below.
196. Allen (1987, 66) and Fox (1996, 41).
197. Sturtevant (1940, 42).
198. Fox (1996, 38–41).

Chapter 6

THE GREEK LANGUAGE IN THE MEDITERRANEAN CONTEXT: PART 2, MORPHOLOGICAL AND SYNTACTICAL DEVELOPMENTS

1. Gamkrelidze and Ivanov (1995, 249).
2. Harris (1939, 41). This seems to have been the situation in Hebrew but Segert (1997, 180) has found remnants of case in Phoenician and even Punic.
3. Palmer (1980, 268).
4. Moscati et al. (1969, 93–4). For Levin’s exhaustive treatment, see (1971a, 34–115). For an Indo-Europeanist claim that *oīn* is cognate to the Sanskrit dual ending *-aios* (no fixed case), see Chantraine (1961, 41). Palmer, too, (1980, 268) is not convinced.
5. Within Canaanite many dialects maintained *-n* in the masculine plural, which was related to the dual. See Chen (2000, 269).
6. Ringe (1977, 69).
7. Erman does not list the word, but see Černý (1976, 315) and Vycichl (1983, 328).
8. Schindler (1976).
9. Szemerényi (1958, 178) and Perpillou (1973).
10. See Gardiner (1957, 270–8 §353–61). See also Hoch (1997, 168–78 §§117–25). Callender (1975, 51) believed that *-w* originally came from a masculine nomi-

native marker *u*. Similar forms are found throughout Afroasiatic. See Diakonoff (1965, 57) and Bender and Jungraithmayr, personal communication Miami, March 1997.

Pace Szemerényi (1974b, 49–50) who argues, on the basis of irregularities in the formation of the feminine *ijereja* “priestess,” that the original form cannot have been **-ew-ya* but must have been **-es-ya*, and, therefore, that in all cases *-eu-* was originally **-es-u*. Given the ease and frequency of changes between the semivowels /w/ and /y/, this seems a very slender thread on which to hang such a drastic thesis.

11. Loprieno (1995, 38).
 12. Albright (1923, 66).
 13. *Καί* was written in the archaic dialects of Arkadian and Cypriot as *κάς* or *κά*. I would explain *κάς* as a back formation of *κά*.
 14. Smyth (1956, 637–8 §2803).
 15. See Gardiner (1957, 188 §255) and Hoch (1997, 156 §137–8).
 16. For “apparent” adjective or noun in apposition, see Allen (2000, 62). For the reconstruction, see Sethe (1902, 92–5).
 17. Schwyzler (1939); Frisk (1955, vol. 1, 19; 1972, vol. 3, 44); and Chantraine (vol. 1, 143).
 18. See Pokorny (1959, vol. 1, 38). Van Windekens (1986).
 19. Levin (1995, 329). I apologize to Professor Levin for not having been able to reproduce his superbly accurate diacritics on the two words.
 20. Levin (1995, 336).
 21. Levin follows the conventional derivation of *>ōtō* from the particle *>et-* or *>ēt* used to mark definite objects. This derivation is strongly suggested by the fact that in the system some plural forms—second-person masculine *>etkem* feminine *>etken* and sometimes the third person as *>ethem/ >ethen*—are vocalized with /e/, while all other persons have /o/. He is puzzled by the difference and tentatively suggests that it resulted from “a mere phonetic reduction of *>ōt*.” He admits, however, that he cannot find a parallel for it, although, like others, Levin has tentatively linked it to *>ōt* “sign.”
- While I cannot provide the parallel or an explanation for the alternation of vowels in the pronominal series, I believe there is a possible etymology for the particle *'et*, as well as the vocalization /e/ in the series containing *>ōtō*. Notice that *'>et* and all its derivations are restricted within Semitic to Canaanite and Aramaic. I believe that this etymology is from the Late Egyptian relativizing particle “the one who etc.” written *nty* but pronounced as “*ent* or even *et*.” See Černý and Groll (1978, 497). In Coptic it was written as *ent* or *et*. Clearly, the overlap between a relativizing particle and an object marker is far from complete. Further, it is interesting to note that *'et-* and its pronominal system are unique to Canaanite and Aramaic within Semitic. These two regions were heavily influenced by Egyptian culture. Nevertheless, the Canaanite restriction of /e/ to definite objects is paralleled by a tendency in the use of *nty* “to be compatible only with defined antecedents and frequently as direct objects.
22. This trajectory has been worked out by Fehling (1980) and Levin (1992).
 23. Loprieno (1995, 69). For the possibility that the masculine p- derived from Khoisan,

- see Chap. 3, n. 138, above, and Takács (2001, 375). Elsewhere, Takács provides another derivation for the *p-* in *pn* as a locative base. This, too, seems possible since in Proto-Bantu the locative gender prefix for “at, on” was *pa-*. See Guthrie (1967, 37 §35.16).
24. Greenberg ([1986] 1990, 512–3).
 25. Levin (1992, 1–2).
 26. Levin (1971a, 701–2). He now points out that Aramaic shows the same repetition in its postposed article (1995, 355, n. 135).
 27. Levin (1995, 354).
 28. Harris (1936, 53).
 29. Segert (1997, 177). Both of these forms came from an earlier form with initial *s-*.
 30. *Ha* is used here simply to cover the many varied vocalizations of the Hebrew article. See Levin (1995, 346–50).
 31. Levin (1995, 360–4). The Indo-Europeanists Ernout and Meillet write in their etymological dictionary of Latin (1985) “on ne peut donc sans arbitraire analyser *ille*.”
 32. See Fehling (1980). The exceptions to the applications of (s)ind- “the” from demonstratives in Old Irish suggest that it was a relatively late development in that language. See Thurneysen ([1949] 1993, 295–6 §470).
 33. Meillet (1965, 187–93). For my views on the dating of Homer, see Vol. 1, 86–8.
 34. Meillet (1965, 191).
 35. See Bernal (1993, rev. 2001, 345–70).
 36. This is essentially a restatement of the position I took in Vol. 1, 55–6, quoted in Levin (1995, 354).

Chapter 7

THE GREEK LANGUAGE IN THE MEDITERRANEAN CONTEXT:

PART 3, LEXICON

1. For instance, in *Lomóngo*, spoken in Congo, the original voiceless bilabial fricative /*f*/ was transformed into a labiodental /*f*/ of the French type, partly because that was the way high-status Europeans pronounced it but also because “French borrowings with /*f*/ strengthened the new phoneme.” See Polomé (1981, 882). Interestingly, as we have seen above, no new sounds were introduced into Greek.
2. Borrowing from Afroasiatic ^h*aleph*, *‘ayin* and prothetic vowels was discussed in Chap. 5, nn. 96–118. Loans with the initial *b-* were an important addition since original Indo-European had few /*b*/ sounds. Egyptian compounds with the masculine article *p3* introduced /*p*/. As initial *s-* and medial *-s-* between vowels were lost in the Second Millennium (Chap. 5, nn. 62–9), new loans beginning with *s-* amplified the extremely small stock of those originating from /*tʰ*/. See Chap. 6, nn. 85–8, for a discussion of *-ss-* and *-tt-*.
3. Some allophonic pairs were, however, phonologized as a result of French influence. See Thomason and Kaufman (1988, 308).
4. Morpurgo-Davies (1986, 105).
5. Liddel and Scott (1925, x). This passage is quoted *in extenso* in Vol. 1, 332.
6. Skeat (1897, ix).

7. Ibid., xi.
8. See Jasanoff and Nussbaum (1996, 185–7).
9. Pace Pokorny who derives $\nu\eta\sigma\omicron\varsigma$ from an Indo-European root $*sn\acute{a}$ “wash.”
10. Chap. 5, n. 23. For the Swadesh list, see his (1971, 271–84). Also see Appendix A, below.
11. Renfrew (1998a, 1999a) accepts that this vocabulary is not “Indo-European” in the narrow sense.
12. The ultimate source of the Semitic root may well be the Egyptian $\check{s}3's$ “ingots of gold.” The words are undoubtedly cognate and, as Egypt and Nubia were the sources of gold for southwest Asia, $\check{s}3's$, or $*hr's$ as it was pronounced before 2500 BCE (see Chap. 8, nn. 48–69, below), is almost certainly the original form. As such it may itself be the source of the Greek $\chi\rho\upsilon\sigma\omicron\varsigma$.
13. For a fascinating discussion of the Indo-European stem that extends much further, see Benveniste (1973, 2, 9–15). On the other hand, Scharfe (1985, 543–8) has argued that what had been seen as the early Sanskrit word $r\acute{a}j$ is not, in fact, attested, and that, therefore, there is no common Indo-European word for “king.” Winfrid Lehmann (1993, 68) accepts Scharfe’s argument on this. Despite the lack of early attestation, the root does appear independently in later Indian languages, so I see no reason to abandon it as an Indo-European root.
14. See Chap. 10, nn. 98–121; Chap. 9, nn. 57–81.
15. English can be described as unlike Greek, Swahili and the others in that it lost its Indo-European morphology as the result of the Norman Conquest. It is clear however, that case endings were lost through stress patterns that were already apparent before 1066. Thus, its “isolating” nature was an internal development and not the result of intense linguistic contact. See Thomason and Kaufman (1988, 306–15).
16. Ventris and Chadwick (1973, 5).
17. See below, Chap. 18, nn. 3–9. The difference of gender between two words is no obstacle, as the gender of the word in a donor language has almost no effect on that in the recipient language. See Corbett (1991, 80–1).
For qds / $\kappa\upsilon\delta\omicron\varsigma$, see below, Chap. 14, nn. 44–7, and Rendsburg (1989, 76–7); Jasanoff and Nussbaum (1996, 196–7) and Bernal (2001, 140–2).
18. Meillet (1965, 59). These quotations appear in Szemerényi (1974a, 147).
19. M. Masson (1986a).
20. She did, however, borrow Muss-Arnolt’s history of the field (1967, 11–6). See his (1892, 34–45).
21. M. Masson (1986a, 199–207).
22. M. Masson (1986a, 201).
23. M. Masson (1986a, 229).
24. See Brown (1965, 1968a, 1968b, 1969, 1971, 1979–80, 1995 and 2000); Levin (1971a, 1971b and 1995); Mayer (1960a, 1960b, 1964 and 1967); and Szemerényi (1966a, 1968c, 1969, 1971–81, 1972a, 1973b, 1974a, 1979 and 1986). Although Szemerényi was Hungarian, he was born, and spent most of his career in England.
25. See Vol. 1, 445–50.
26. Brown (1995, 342).

27. Orel and Stolbova (1995, 390 § 1802). Gelb (1957) discussed the Akkadian *taḥḫarum* “battle” and *ma ḫirum* “facing in front, before” which in Akkadian has the forms *maḫri* and *maḫris*. This form is not attested in Canaanite, although the same root $\sqrt{\text{mhr}}$ “in front” appears in *māḫār* “tomorrow.” *Ma ḫri* would seem a plausible etymon for the Greek μέγρι “as far as, upto” and, possibly, for the Armenian *merj* “at” which is the latter language’s only Indo-European cognate.
28. Brown (1995, 141–2) sees it as from Greek to Hebrew, while Muss-Arnolt (1892, 72) and West (1997, 38) see the reverse.
29. I propose *r-sqī “place for passing time” *isq* “delay, linger” in *isq t* Amenope 26, 16 with □ (O1) suggesting a house or room. Late Egyptian Demotic *isq* “retard, delay, linger, stop,” Coptic ōsk. See also Chap. 21, nn. 127–9.
30. For a bibliography of the nineteenth-century literature on the topic, see Muss-Arnolt (1892, 56–7).
31. Clackson (1994, 33). Lejeune ([1972] 1987, 148–9) shares Clackson’s view. Jasanoff and Nussbaum (1996); the derivation of *erebos* is on p. 183.
32. Pokorny (1959, vol. 1, 334).
33. Bomhard and Kerns (1994, 523–4).
34. Levin comes to the same conclusion on the different grounds that the /ǧ/ in the Arabic ḡrb cannot be derived from Indo-European. A number of Semitists, however, have maintained that the /ǧ/ in this case came from an **ayin* in contact with an /r/. See Bomhard and Kerns (1994, 523).
35. Brown (1995, 57–8).
36. Astour (1967a, 130). Gelb et al. (1956–, vol. 4, 256) distinguish the Akkadian *erēbu* “enter” from the specific *erebu* “setting sun.” They do, however, see a “conflation” of both in *erēpu* “dusky, dark.”
37. See, for instance, Chap. 20, nn. 79–80 and Chap. 21, n. 77.
38. For Barthélemy see Vol. 1, 171. For Birch and Brugsch, see Vol. 1, 254–61. For Bochart, see Vol. 1, 169–71.
39. See Vol. 1, 262–3. Erman admitted some thirty Egyptian “exotic” words in Greek, in his and Grapow’s dictionary. See Erman and Grapow (1926–53).
40. For personal and scholarly portraits of all of these, see Gardiner (1962).
41. Hemmerdinger (1968) and McGready (1968).
42. McGready (1968, 252–3).
43. Hicks (1962, 108). This, of course, is paraphrasing the famous statement in *Epinomis*, 987D. For Oliver Goldsmith’s use of this theme to justify European superiority, see Vol. 1, 198.
44. Pierce (1971).
45. Fournet (1989).
46. Daniel (1962; 1971).
47. See Chap. 2, n. 8, and Bernal (1997b, 165–7).
48. Alford (1991), Cook (1992) and Griffith (1996, 1997a and 1997b).
49. The prevailing view is that the term is Semitic. In 1907 Spiegelberg saw an Egyptian etymon for *buṣ* from *w3ḏt* “green linen.” He demonstrated that in early times the Egyptian *ḏ* corresponded with the Semitic emphatics /t/ and /ṣ/. He pointed out, on the principle of *Säthe und Wörter*, that the biblical and Greek references to

- linen and other fine cloths pointed to Egypt. He also showed other Hebrew words in the same semantic field—*šēš* “fine cloth,” *šāṣ* “to weave spin” and *nuta* “yarn, thread”—had Egyptian etymologies” (1907, 127–31). Eighty years later Levin (1995, 293, n. 337) expressed his doubts: “We think of Egypt as the ancient home of linen, the Egyptian word *wʒd t* “green fabric” . . . makes an unsatisfactory etymon both phonetically and semantically.” Spiegelberg maintained that in parallel Coptic examples an earlier /w/ had become a /b/.
50. *The Phoenician Women*, 668–71, trans. P. Vellacott (1972, 260).
 51. The subject is discussed inconclusively in Plato’s *Cratylus*, 319D–329B
 52. Jernstedt (1953, 55–6). For a discussion of *m(w)dw ʔtr*, see Allen (2000, 173).
 53. Hodge (1989, 411).
 54. Iamblikhos, *De Mysteriis Aegyptiorum* 7: 4–5; based on the translation into French by E. des Places (1996, 193).
 55. Vol. 1, 98–101.
 56. *Supphants*, 558–61
 57. *Iliad* 9: 381–4. Interestingly, ever since Christian Gottlob Heyne wrote in the late eighteenth century, “scientific” source critics have declared these lines praising Egypt spurious. [For Heyne see Vol. 1, 221–3 and Bernal (2001, 174–5).] Scholars have attacked these lines for their resemblance to lines in the *Odyssey* and their anachronism. They maintained that the two Thebes had not flourished together since the thirteenth century and that Greeks could not have known anything about Egypt before the founding of Naucratis in the seventh century. For a bibliography, see Froidefond (1971, 31–3), who still accepts the source critics. I see no reason to doubt the authenticity of these lines, which were never challenged in antiquity. Their “fault” is ideological; they challenge Greek and European superiority. The Alexandrian scholars themselves sometimes challenged Homeric lines because they were inconvenient. See the discussion of *onar* and *hypar*, see Chap. 10, nn. 174–85.
 58. *Odyssey* 4: 125–30 and 220–3, trans. Murray (1919, vol. 1, 123). For the Egyptian etymologies of Paieon and Apollo, see Chap. 9, n. 5 and Chap. 19, nn. 74–6, below.
 59. *Iliad* 1: 403–4.
 60. *Odyssey* 10: 305.
 61. *Iliad* 2: 813. See below Chap. 19, nn. 188–90.
 62. *Iliad* 20: 74.
 63. *Iliad* 15: 291.
 64. Chap. 19, nn. 188–90.
 65. For discussions of *ʾŌg*, see Vol. 2, 84–5 and Noegel (1990).
 66. Bérard (1927–29, Vol. 3, 73).
 67. Astour (1967a, 294–5).
 68. *Iliad* 2: 811–4, trans. Murray (1924, Vol. 1, 111).
 69. Chap. 10, n. 33.
 70. Astour (1967a, 294–5).
 71. One need not accept all of Norayr Vrouyr’s proposals to be persuaded that there are hundreds of Semitic loans in Armenian. Vrouyr (1948).

72. For the complexities of the alleged genetic relationship, see Clackson (1994, 168).
73. Compare also the Arabic *zāda* “he increased, exaggerated” and possibly the Akkadian *šadu* “glow.”
74. For the name, see Posener (1940, 82) and Helck (1971, 58). For a bibliography, see Katzenstein (1973, 19). See also Chap. 5, n. 73, above.
75. Mayer (1960a, 90). She, however, admits that the term was possibly of Mediterranean origin. See also Klein.
76. Chantraine saw the connection between Μῶλυ, μάλαχη and *malua*.
77. It is interesting that in his *The Foundations of Latin*, Philip Baldi (1999, 14–8) is quite open to the idea of Nostratic and willing to question the principle of *Aufnahmslosigkeit*. He never refers, however, to the possibility of a substantial number of loans into Latin from Semitic or Egyptian.
78. Carpenter (1958). This outlook was largely shared by Harden (1971), although he was the author of a disproportionately short chapter on the Phoenicians in the last edition of the *Cambridge Ancient History*. W. Culican (1991, 461–546) fully appreciated the Phoenicians’ importance and their Bronze Age roots. The CAH chapter ran after the one on the Babylonian exile of the Jews in the sixth century BCE. This placement preserves the idea of late Phoenician expansion.
79. See Albright (1975, 522–6) and Cintas (1948).
80. See the bibliography in Bunnens (1979, 281–2). Niemayer (1984, 1–94; 1988, 201–4) argues for late eighth century. Sabatino Moscati (1985, 179–87) attacks such minimalism. Moscati argues for Canaanite activities in the West Mediterranean in the fourteenth and thirteenth centuries and Phoenician activity in the tenth. Basing his dating on epigraphical evidence, Cross (1979) argues for Phoenician expansion in the Mediterranean in the eleventh century. Boardman (1990, 178) sees it as having taken place in the tenth or ninth centuries. This is also Pallottino’s opinion (1984, 203–4).
81. Pallottino (1963).
82. Pallottino (1984, 84–5).
83. Nougayrol (1955). Burkert (1992, 50–1) insists on the closeness of the Etruscan and eastern haruspicy.
84. Van Berchem (1959; 1967). This interpretation has been challenged by Bonnet (1988, 294–303) and defended by Brown (2000, 209–10).
85. Nepos, *Hannibal* 7.4; Livy 3.55.1; and Varro 6.88. See Brown (2000, 103). For the Semitic etymology of the element -sul, see below.
86. For another example of a Greek borrowing from the Canaanite present active participle, see *poiōō* “make” from *po’ēl* “making.” See Chap. 14, nn. 41–2, below.
87. Westbrook (1988).
88. The leading contemporary historian of early Rome, Tim Cornell (1995, 146–8) is still reluctant to see the Near Eastern parallels to the Roman New Year celebrations that have a *hieros gamos* at their center. He admits, however, that other Near Eastern institutions were introduced into the Roman-Etruscan kingship. See Westbrook (1999, 220).
89. See Ernout and Meillet. Brown (2000, 218) writes that he cannot find a prototype for *magalia*. I believe that it has a plausible etymology from *mḡr* “cave.” See

the etymology of Megara, Chap. 20, nn. 157–60 below. For *aue* or *haue*, see also Levin (1995, 156).

90. Though undoubtedly Indo-European *sreu is not attested in Italic. Brown and Levin (1986, 95) write about this: “We cannot rule out the beautiful suggestion of Martin Bernal that, in view of the Etruscan-Punic contacts attested by the Pyrgi inscriptions, Rōma means “height, citadel” (i.e. the Capitoline Hill) and is related to רָמָה [rāmāh] “height.” Brown now has reinforced my “radical proposal” with a number of other related Phoenician contacts with early Rome (2000, 209–10). See, also, Brown (1995, 24).
- The Mishnaic Hebrew and Aramaic form Rumē is clearly derived from the Greek Ρώμη.
91. See Procopius 1:19.29; Pliny *Natural History* 6:35. Arkell (1961, 178); Adams (1977, 384–92).
92. There is no reason why the Etruscan form of the name, Nethun, should be older than Neptune. Nethun is more likely to derive from Neptune than vice versa. Unfortunately, my friend and colleague John Pairman Brown (2000, 8) has misunderstood me on this issue. I have never suggested that Neptune’s name came from Nbt Ḥt, Nephthys.
93. Dennis (1848, vol. 1, 109). See also Bernal (1997c, 156–7).
94. The name Thefarie Veliūnas. for the Etruscan ruler of Caere in the early sixth century BCE, was rendered Tbr̥’ wlns in the Phoenician version of the Pyrgi tablets. This rendering shows that the personal name Tiberius, presumably derived from Tiber, was very early. Bonfante and Bonfante (1983, 52–5).
95. See Chap. 5, n. 118. For the anti-Semitism involved in Beloch’s attempt to deny this obvious connection, see Chap. 1, n. 32, above, and Burkert (1992, 34).
96. Servius 7: 517.
97. See Hammond and Scullard (1970, 1038). The name Tarquin itself was derived from Tarḫun, the Anatolian thunder god. This is further evidence for the Etruscan-Anatolian connection proposed by Herodotos and the majority of ancient writers.
98. Palmer ([1954] 1988, 13).
99. See Psalms 76: 5.
100. Pokorny (1959, vol. 1, 36). He does not, of course, go beyond Indo-European.
101. See Jakobson (1990, 305–12).
102. See Orel and Stolbova (1995, 239, no. 1065).
103. Given the substantial loaning from Latin to Irish there is no reason to suppose Irish *suim(m)* “sum, amount” is related genetically.
104. Orel and Stolbova (1995, 461 §§2186, 2188).
105. Strabo, 8: 3.19. Finding an example of the root in Anatolia, Fick (1905, 54, 112) declared the root to be “Lelegian.”
106. There is, however, one tantalizing possibility of an early borrowing. Related forms to the Latin *terra* “earth, land” are found not only in other Italic languages but also in Celtic. They provide one of the exclusive links between the two Western European language families. However, the Egyptian t3(“tr) “earth, land” is deeply rooted in the most archaic Afroasiatic languages; see Takács (1999, 228–9). Is this a simple coincidence or do both come from Proto-Nostratic [Bomhard and Kearns

- (1994) does not include it] or is it an early loan from Afroasiatic to Proto-Italo-Celtic?
107. The papal encyclical formula “ad urbem et orbem” plays on this similarity.
 108. Brown (2000, 218–24).
 109. A puzzling use of *wʾb* to describe a sail could well refer to a sail furled, paralleling the meaning “swaddling clothes” written in the same way with the cloth radical.
 110. Erman and Grapow (1926–53, vol. 1: 251); Gauthier (1925–30, vol. 1, 175).
 111. The initial liquid may have had a suprasegmental influence on the /r/. In any event, introduction is a common linguistic feature; see the discussion on κῶδος in Chap. 14, nn. 45–50.
 112. See Gauthier (1925, vol. 1, 99).
 113. For a discussion of the prefix *pr*, see Chap. 9, nn. 125–66. For *ntr*, see Chap. 10, nn. 1–85.
 114. I am grateful to my colleague Gary Rendsburg for persuading me to refer to this etymology.

Chapter 8

PHONETIC DEVELOPMENTS IN EGYPTIAN, WEST SEMITIC AND GREEK OVER THE LAST THREE MILLENNIA BCE, AS REFLECTED IN LEXICAL BORROWINGS

1. Vycichl (1959, 70).
2. Herodotos 2: 55–6. For further discussion of this etymology, see Vol. 1, 65, 78, 82 and 99 and English (1959), who to my knowledge was the first who proposed this etymology.
3. The proposed Indo-European cognates for *kósmos* are the Latin *censeō* “to make a solemn declaration,” and the Sanskrit *śáṃsati* “he recites.” Both are wildly far-fetched in their semantics. See Chap. 14, nn. 53–6, below.
4. Note the alternation of unvoiced and aspirated forms kh/p, k/ph.
5. The plausibility of semantic equation would be increased if one postulates Egyptian-speaking masters over Proto-Greek-speaking subordinates.
6. Frisk points out that κόλαφος was borrowed into Latin as *colpus* hence the Italian *colpo* and the French *coup*.
7. See Bernal (2001, 134–5).
8. See Lagarde (1866 1: 228). Burkert (1992, 39) wrote *harba*. The root is in fact √h₁rb not √h₂rb and Aramaic does not possess the phoneme /h₁/. The softer /h₂/ actually strengthens the etymology as /h₂/ would be more likely rendered /kh/ or /k/ in Greek.
9. Lewy (1895, 177). See Chap. 7, n. 20 for more discussion of Lewy.
10. For a discussion of this, see Jasanoff and Nussbaum (1996, 183) and Bernal (2001, 134–5).
11. See Chap. 16, nn. 61–3.
12. For the endless and pointless arguments as to whether Eblaite should be considered “East” or “West” Semitic, see the survey in Gelb (1981, 46–52).
13. See Goerwitz (1996, 489–97) and Daniels (1997, 22, 30).
14. See Chap. 5, nn. 196–8.
15. See also Bochart (1646, 1: 517) and Muss-Arnolt (1892, 58–60). The English

- “typhoon” appears to have two sources: the Greek name through Arabic or Persian and a Cantonese *daifung* (*dafeng*) “great wind, gail.” I am grateful to Gary Rendsburg for persuading me to include this etymology.
16. For the dates of these shifts, see Harris (1939, 40–1). Also, see Chap. 5, nn. 82, 161, above, and Albright (1950, 165–6).
 17. Greenberg (1962).
 18. Gardiner (1957, 28 §19).
 19. *Ibid.*, 428. See Jasanoff and Nussbaum (1996, 199) for their challenge on this issue. For my response, see (2001, 144).
 20. Loprieno (1995, 61–2). Although I am happy to accept the quotation as it stands. I suspect that in the last sentence the author means “less” rather than “more” diversified.
 21. Chap. 5, nn. 63–70, above.
 22. For Ehret’s doubts on this, see Chap. 5, nn. 150–2, above.
 23. The use of /d/ to represent the emphatic Semitic /ṣ/ and /t/ was mentioned above Chap. 5, n. 82.
 24. Loprieno (1995, 38).
 25. For these confusions, see nn. 47–69 below.
 26. See, for instance, Vergote (1971, 44). For a bibliography of earlier recognition that /ʒ/ was originally a liquid, see Vercoutter (1956, 20, n. 4). Vercoutter himself also accepted it as possible. Nevertheless, it was not known by Otto Rössler (1964, 213) or Carleton Hodge (1971, 13–4; 1977; 1992). These two independently published the same results. See Hodge (1997).
 27. For a description of this debate, see Takács (1999, 333–44).
 28. Orel and Stolbova (1995, xx).
 29. Loprieno (1995, 31, 38) and Takács (1999, 50–8).
 30. Loprieno (1995, 31, 38) and Kammerzell (1994a, 31). The value of /ʒ/ as a liquid is now accepted by informed classicists; see West (1997, xxiii).
 31. Chap. 10, nn. 86–93.
 32. Jasanoff and Nussbaum (1996, 195).
 33. For the textual and archaeological evidence, see Vol. 2, 409–94. For linguistic evidence, see n. 15 above and Chap. 5, nn. 83, 161–5.
 34. Jan Assmann (1993, 400) argued that my proposal that *mʒ* could be borrowed into different Greek words both before and after the disappearance of the consonantal /ʒ/, somehow weakened my claim. I find such slack reasoning startling in so intelligent a scholar.
 35. Hesiod, *Theogony* l: 180.
 36. For the importance of these in harvesting, see Chap. 2, nn. 45–8.
 37. The final -n is also found in Semitic. In Akkadian *karānu* is “vine.”
 38. Frisk suggests the Lithuanian, “smith, hammer.”
 39. I accept the conventional transcription of /w/, while remaining agnostic on Greenberg’s reinterpretation of the Coptic long vowels. See, above, n. 16.
 40. Frisk linked it to κῶμη “village,” which may have an Indo-European root, although he admits that the development of the meaning “should be conceived differently.” At one point Chantraine sees this connection as a mere possibility; at another he rejects κῶμη as an etymology for κωμῳδός.

41. Brugmann (1913, 317).
42. See Gardiner (1957, 491).
43. Cyrus Gordon (personal communication, 1998) accepted this etymology. The uncertainty of renderings of Egyptian /š/ is discussed below, nn. 47–8.
44. Erman (1933, §153) and Lesko (1989, 4: 71).
45. For this as the origin of Thēseús, see Chap. 5, n. 123, above.
46. See Takács (1999, 333–93).
47. For the comparable Greek correspondences with the Semitic /š/, see Hopkins (1976, 268), According to Rössler, ☉ the sign conventionally rendered /ḥ/ was originally a voiced /ḡ/. Kammerzell, personal communication, Cambridge, Sept. 1995.
48. Kammerzell (1994a, 31).
49. See the examples given in Astour (1967a, 136).
50. For long-standing difficulties in interpreting the Coptic vowels conventionally, see n. 18 above.
51. More likely χήρα derives from the Egyptian *ḥ/ḥ3rt* “widow.” Chantraine prefers to link this to an Indo-European root *ca-* or *ch-* signifying deprivation.
52. Chantraine finds the etymology for this word “uncertain.” Frisk proposes a root *gher “to contain.” More likely χορός comes from the Egyptian *ḥrw* “voice, noise” including “that of music.”
53. *Iliad* 2: 461.
54. See Chap. 15, below, nn. 88–9.
55. There is also the mysterious word š3rt. Faulkner enters it as “void?” but Lesko says “property?” If the latter it would tally with χρεῖος “need, poverty.”
56. Lest anyone should question the value of /š/ as /ḥ/ in Late Egyptian, we should remind ourselves that first attestation of the word in this stage does not mean that it was not in use before.
57. For Eudemus, see West (1994, 290–1). For Pherecydes, see West (1971, 28–36; 1983, 103–5, 198–203).
58. Both Frisk and Chantraine admit that they have no etymology for *nānos*. For Egyptian and Greek views on and treatment of dwarfs, see Dasen (1993). It is possible that *nmw* is related to the southern Afroasiatic root *nam “man,” attested in East Chadic, Lowland East Cushitic and Omotic. Orel and Stolbova (1995, 398 §1841).
59. Van Windekens (1952, 142).
60. Kháos is, of course, the origin of our words “chaos” and “gas.” The seventeenth-century Flemish chemist Johann Baptista van Helmont invested the latter term on the basis of chaos (pronounced *ghas* in Dutch).
61. See, for instance, Hornung (1982, 77).
62. *Theogony*, 116.
63. Takács (1999, 384).
64. See Chap. 5, n. 109.
65. See Bernal (2001, 262).
66. For discussions of Caland’s law, see Jasanoff and Nussbaum (1996, 196) and Bernal (2001, 141–2). A similar pair αἰσχύρος and αἰσχος “deformed, repulsive”

- might be borrowed from different but two probably related, words *wš* and *wšr* with this semantic field.
67. See Chap. 15, n. 157.
 68. Plutarch, *De Iside*, 355A.
 69. Thompson (1947, 284).
 70. See Westendorf (1962, 23–4).
 71. Greenberg ([1958] 1990, 410; 1965).
 72. See Gamkrelidze and Ivanov (1995, 52–3).
 73. For the Semitic, see Takács (1999, 286, 291).
 74. See Bernal (1990, 91–3). Of course, the names do correspond; I see this as an example of letter names being introduced centuries after the letters themselves. See Bernal (1990, 125–6).
 75. See Westendorf (1962, 23) and Takács (1999, 284, 287).
 76. See, for instance, the initial *bnw* > *φοινιξ* and *w3h* -ib R' > *Ουαφφης* both attested in Erman and Grapow ([1953] 1982, 6: 246–7).
 77. See, for instance, Lejeune ([1972] 1987, 59).
 78. For an example of this kind, see the case of *G^wabel* > Byblos mentioned, above, Chap. 5, nn. 159–61. A later form of *q* with the shaft dropped still further made the Roman *Q*.
 79. Bernal (1990, 115–6).
 80. Gamkrelidze and Ivanov (1995, 54–5).
 81. Similar alternatives of /b/ and /p/ are found in Old and Middle High German.
 82. Chadwick (1975, 808) stated that this was only possible for the dental series since voicing was not marked for the labial and velar stops. On analogical grounds, however, it seems plausible to suppose the latter shift at approximately the same time.
 83. Whether in the Bronze Age *phi* was pronounced as an unvoiced aspirate /p-h/, as in the Classical and Hellenistic periods, or as a fricative /f/, as it was later, is irrelevant to this argument.
 84. Vycichl found it difficult to explain the later Demotic and Coptic -w-.
 85. For an Egyptian etymology for *φρήν*, see the discussion in Chap. 9, nn. 39–42.
 86. Masson in Chantraine (1225).
 87. Orel and Stolbova (1995, 376, 1736).
 88. See Chap. 5, nn. 104–5, above.
 89. Orel and Stolbova (1995, 376 §1730) and Takács (1999, 121).
 90. Orel and Stolbova (1995, 375 §1727).
 91. For a bibliography on this, see Cohen and Wallfield (1985).
 92. Cohen and Wallfield (1985).
 93. Levin (1995, 222–7).
 94. Anttila (2000, 91).
 95. The difference between the final -b in Semitic and *p* in Greek might seem to create a minor obstacle but the exchange is attested in transliterations in the list given by Astour (1967b, 293) in which the Hebrew /b/ was rendered, β, ββ, π or φ in Greek. Furthermore, as Dahood (1968, 126) pointed out specifically, “The numerous examples of the non-phonemic interchange between the sonant labial

b and the mute labial *p* in Ugaritic and Phoenician authorize the biblical researcher to proceed on the assumption that a rigid distinction between these was not always maintained in Hebrew.”

Anttila does not treat *āḡa-* as an intensifying particle; Chantraine considers the etymology “uncertain.” There is a plausible explanation from the Egyptian *iqr* “excellent, splendid” which can explain many of the words Anttila derives from *āḡw*.

96. Anttila (2000, 82–90).

Chapter 9

GREEK BORROWINGS FROM EGYPTIAN PREFIXES, INCLUDING THE DEFINITE ARTICLES

1. See Chap. 6, nn. 23–4. The possibility that the deictic masculine singular *pn* from which *p3* was reduced derived from a form found in Central Khoisan and Proto-Afroasiatic was mentioned in notes 119–39, Chap. 3.
2. These are simplifications of Černý and Groll (1978, 41–2 §3.1.2; 43 §3.2; 44 §3.6.1).
3. See Gardiner (1957, 417–8).
4. See Chap. 8, nn. 75–6.
5. See Chap. 19, n. 20, and Astour (1967a, 313).
6. See Vol. 1, 83, and Vol. 2, 129.
7. Vol. 2, 171.
8. Thompson (1947, 193–4).
9. Pokorny (1959, 842).
10. Neumann (1970, 76–9).
11. Bomhard (1994, 127) sees the Nostratic initial *k^{y[h]}* as corresponding to a PIE *k^[h]*. I wonder if, in this case at least, the /i/ in the Teutonic words derives from an original glide. Skeat (1897) denies any relationship between *kind* and child. This denial is puzzling given the ease of shifts from *l* > *n* and vice versa.
12. Orel and Stolbova (1995, 526 § 2520).
13. See Hodge (1976b and 1991).
14. The ratio among Takács’s (1999, 86–92) examples is 15:5 for **l* and 8:1 for **r*.
15. Hodge (1976b and 1991, 172).
16. Chadwick (1973, 538).
17. For *Nēr* from the Semitic *nahr*, see Chap. 14, nn. 33–4, below, and Chap. 7, n. 96, above, for its use in Latin toponymy.
18. See Chap. 5, n. 21, above.
19. John Ray made this point to me in 1985 in Cambridge. As noted in n. 11, above, *hrd* itself probably belongs to the same family.
20. Jernstedt (1953, 92–4).
21. *Hymn to Delian Apollo*, 120–1, trans. Evelyn-White (1914, 333).
22. Apollonios, *Lex HomERICA* Φοῖβος. Attributed to Hesiod, trans. as Frg. 8 by Evelyn-White (1914, 283).
23. Müller (1824, 2: 6 § 7).

24. See also, Farnell (1895–1908, 4: 140).
25. See Chap. 5, nn. 157–8. I first published this observation in 1997 (1997a, 90).
26. Herodotos, 2: 143. Lloyd (1988, 110) points out that the translation *καλός καθαός* indicates that *πίρωμις* referred to an Egyptian of superior station. Rendsburg (1989, 75) accepts my derivation of *πυραμίς* from *p3 mr*.
27. For the Coptic form, see Gardiner (1947, 2: 177).
28. See Vol. 2, 141–2.
29. Loprieno (1995, 47–8).
30. Pokorný does not set *φήνη* under the root **bhā-, *bhō-, *bhə-* “shine.”
31. Chap. 6, n. 12.
32. See Gamkrelidze and Ivanov (1995, 426–30). For the nineteenth-century orthodoxy, see Benfey (1842) and Curtius (1879). Also see Kammerzell (1994b, 32).
33. For the Egyptian derivation of the Greek patronymic *-i(ā)d s*, see nn. 16 and 17, above.
34. *Iliad* 1. 188–9; 22.27, 45, 113, 118, 294, and 333; 21.306; 22.194 and 278; 23.30. *Odyssey* 24.23.
35. *Iliad* 20.164–75. See also, 18.318–23, and 24.41–4.
36. Chantraine denies the plausible identification of the *Ἀχαιοί* with the *iqwš*, one of the “Sea Peoples” who raided Egypt in the thirteenth century. See Gardiner (1961, 270). Chantraine dismisses all attempts to find Indo-European etymologies for *Ἀχαιοί*.
37. Thompson (1947, 198).
38. See the Miniature Frieze, Room 5, South Wall, the West House. Illustrated in Morgan (1988, 137–41) and Doumas (1992, 68–81, pll. 36–48). I first proposed this etymology in 1997 (1997a, 89).
39. The Egyptian *m* is not Afroasiatic but derives from Nilotic. Other loans into Egyptian from Nilo-Saharan include *dp* “taste,” *hpt* “oar,” *ib* “horn” and *wn* “desert hare.” See Takács (1999, 38–45).
40. The /ō/ in the negative *ἄφρων* “without *φρήν*” is plausibly explained by Gamkrelidze and Ivanov as the result of a “post-tonic *e* adjacent to a sonant.” They give other examples of this phenomenon (1995, 144, n. 15).
41. Vernus (1982).
42. Onians ([1955] 1988, 37–9).
43. For a discussion of kidneys in Egyptian culture, see Chap. 11, nn. 2–4.
44. Takács (1999, 51–2).
45. Szemerényi (1977, 9).
46. Onians ([1955] 1988, 37).
47. *Ibid.*, 19–20.
48. Fontenrose ([1959] 1980, 24–7).
49. See nn. 139–41 and 176–7, below.
50. Kallimakhos, Hymn 1.1.3, quoted in Bulloch (1989, 10).
51. Loprieno (1995, 41).
52. See Chap. 18, 60 and Chap. 15, nn. 88, 91.
53. Thompson (1966, 335) sees the etymology as “confused and doubtful” but thinks there may be a relation with “sparrow.”

54. Chap. 20, n. 173.
55. See n. 53, above.
56. Farnell (1895–1909) 4: 314–5 and Green (1990, 590). See below Chap. 18, n. 82, and Chap. 19, nn. 142–59.
57. See Chap. 7, n. 13.
58. Daniel (1971, 61–4). He accepts the suffix *-eus* as Hellenic. For my denial of this, see Chap. 6, nn. 9–12.
59. Bernal (1985 76).
60. See Edel (1978, 120–1). Since the conventionally rendered Akkadian /š/ corresponded to the Egyptian /s/, I have used the form Pasiyara. The vocalization of *sr* as **sir* is strengthened by the Etruscan *zil* “ruler or magistrate,” which is surely a loan from the Egyptian *sr*.
61. Jasanoff and Nussbaum (1996, 196).
62. See Chap. 8, n. 24.
63. Other cases exist where unvoiced stops have allowed the labial to be rendered as b- **p3* ity “the sovereign”/βάρτος “king of Libya” and **p3* hnw/βανωτός “vase.”
64. Chadwick (1973, 399).
65. Szemerényi (1966b, 29).
66. Palmer (1956, 1965 and 1984b); Niemeyer (1982a and 1982b). Also, Catling, Cherry, Jones and Killen (1980).
67. Lejeune (1987, 46).
68. Szemerényi (1966b, 30–1). The exception was the voiced *g^hi*, which became *bi*.
69. Chadwick (1973, 389).
70. Ibid.
71. Lejeune ([1972] 1987, 43).
72. Bernal (1990).
73. Bernal (1987b, 14) and (1990, 115–6).
74. Jasanoff and Nussbaum (1996, 196). There may be an example of an Indo-European labiovelar being written *pa* in Linear B. Chadwick (1973, 399) was still concerned about his and Ventris’s earlier conclusion (82) that the Greek *pas/pan* “all” was written with a *pa* when the conventional view was that it derived from a root **kwant-*. Chantraine accepts that the Mycenaean spelling rendered this etymology “out of date.” He resorts to Tokharian B to find a plural form beginning with a p-. Frisk does not appear to have known about the “discovery” and retained his belief in the traditional, and admittedly very attractive, etymology.
75. For examples, see Lejeune ([1955] 1987, 46–7 § 33).
76. Jasanoff and Nussbaum (1996, 204–5).
77. In modern Hebrew, foreign words are transcribed with *quf* and *tet* rather than the more frequent *kaf* and *tav* (although this may be to avoid spirantization when the latter forms are preceded by a vowel). In any event, the rarer letter indicates that the word is of foreign origin. The Japanese use of *katakana* syllabary to represent foreign words, rather than the far more common *hiragana*, is not the least bit ambiguous.
78. See the examples in Gardiner (1947, 1: 175 and 2: 6, 155).
79. Chap. 6, nn. 9–12.
80. For a bibliography on this topic, see Edel (1978, 120–1).
81. See Chap. 6, nn. 9–12.

82. See Farnell (1895–1909, 5: 272–9).
83. Jablonsky (1804, 416).
84. See Chap. 12, n. 26.
85. See Chap. 8, nn. 60–3.
86. See Erman and Grapow ([1926–1953] 1982, 4: 432–3) and Gardiner (1957, 173).
87. Gardiner (1957, 416–8 §511).
88. Hopkins (1976, 268) and Bernal (1990, 104).
89. Onians ([1955] 1988, 120, n. 4).
90. Benveniste (1932, 165–8).
91. Pokorny (1959, 146) and Schwyzler (1939, 1: 329).
92. See Chap. 22, n. 241. For a detailed description of the site of this court, see Frazer (1898, 2: 375–8). See also Kourouniotes and Thompson (1932).
93. Gardiner (1957, 497).
94. See Vol. 2, 588, n. 113.
95. For a discussion of this etymology and that of $\pi\eta\eta\acute{\eta}$ from the Egyptian pg^3 “spurt-ing out,” see Vol. 2, 94–5.
96. *Iliad* 1.155. For the identification of Larisa with Phthia, see *Inscriptiones Graecae*, 41: 5.542.32. The Homeric ruler of Phthia was, of course, Achilles. For the Semitic origin of his name, see n. 36, above.
97. Gauthier (1928–31, 2: 42). Later inscriptions simplified P3 T3 to Pt; see Gauthier (1928–31, 2: 154–5).
98. For the Nostratic root, see Bomhard and Kerns (1994, 239, n. 44.).
99. Chadwick (1973, 493–4).
100. For the Egyptian, see Foster (1974, 5–6). For the Greek, see Onians ([1955] 1988, 54–5).
101. *Palatine Anthology* 12.157 trans. in Onians ([1955] 1988, 55).
102. I am indebted to Dr. Kim Haines-Eitzen of Cornell University for this reference.
103. See Chap. 8, n. 61, above, and Erman and Grapow ([1926–53] 1982, 5: 350–1).
104. *Pneûma* also played a central role in Pythagorean and Orphic cosmogonies as well as in the philosophy of Anaxamines. See Onians ([1955] 1988, 250–2) and Guthrie (1962, 127–8).
105. See Jasnow and Zauzitch (1995).
106. Even the very skeptical Albert Baumgarten agrees that some of the material in Philo may date back to the late Second Millennium. Baumgarten (1981, 266–7).
107. Preserved by Eudemos in Damaskios, see Jacoby (1923–58, 3: 784: F.4). See also Baumgarten (1981, 110–1) and West (1971, 28–9 and 1997, 284–5).
108. Quotation from Philo is found in Eusebius; see Jacoby (1923–58, 3: 806, F.10). The translation is from West (1994, 296). I see no reason to accept West’s emen-dation of the text here (1994, 298). It makes good sense as it stands.
109. West (1994, 298).
110. Clapham (1969, 53) and Baumgarten (1981, 133).
111. It also signified its opposite “poison.”
112. See Gardiner (1957, 51 §§ 56–7).
113. See the examples given in Erman and Grapow, Faulkner and Lesko.

114. Takács (1999, 127).
115. Orel and Stolbova (1995, 391 §1806). It is also found in Niger Congo languages, the common form *muntu*.
116. Pokorny translates *bitte* “pray, entreat,” Chantraine, *supplier, prier*. Frisk takes the noun *guide* as *gebet* “prayer.” Thurneysen ([1949] 1993, 49), who sees *póthēō* as a cognate to *gu(i)did*, always translates the root *gu(i)d- simply as “pray.”
117. In Chinese *feng* “wind” has a specialized meaning of “to be on heat” said of animals.
118. This etymology is also mentioned in Bernal (2001, 344).
119. Herodotos, 8.135 and Pausanias, 9.23.3.
120. Bin appears to have been a Niger-Kordofanian or Kongo-Saharan loan into Egyptian. See Takács (2001, 145).
121. Kretschmer (1909, 325).
122. Gardiner (1957, 430).
123. Hampe and Simon (1981, 212, pl. 325).
124. Bomhard and Kerns (1994, 249 §55).
125. Sallust *Jugurtha* 18.8.
126. Obenga (1993, 284 §5) cited in Takács (2001, 456).
127. See the Basaa, *pélé* “house.” Ndigi (1993, 111).
128. See, for one of many examples, Palmer (1980, 12–3). For a skeptical view, see Chap. 20, nn. 63–7, below.
129. Takács (2001, 457).
130. A possible explanation for the final -n in *parn* is from the frequently used Egyptian combination *pr-n* “house of.” See Erman and Grapow.
131. Gardiner (1957, 9).
132. Redford (1963, 119).
133. Loprieno (1995, 13).
134. For more on the Messapi, see Bernal (1990, 44–5).
135. Nst Hr is attested in Erman and Grapow and Nst wr in Gauthier (1925–31, 3: 103). See also Chap. 19, nn. 218–9.
136. For these Coptic alternations, see Loprieno (1995, 42).
137. It should be pointed out that, in the triscriptural *Canopus Decree*, φῶλή corresponds not to the Egyptian *pr* but to *s3* “guard.” See hieroglyphic line 13 and Greek line 87. See also Sethe (1904b, 2: 134).
138. Redford (1963).
139. See Gauthier (1925–31, 2: 50).
140. Herodotos, 2.48, trans de Selincourt (1972, 149).
141. I first proposed this etymology in 2001 (2001, 131). Alan Bomhard—Bomhard and Kerns (1994, 205–6)—sees the word φαλ(λ)ός (5) “phallus” as deriving from a Nostratic root, *bul-/ʔbol “swell, inflate” found in the Indo-European root *b^hel-/ʔb^hol/*b^hl₂. E. Masson sees this as the source of φαλ(λ)ός. Bomhard postulates a cognate Afroasiatic branch *bal-/ʔb¹ “swell, expand.” Takács (2001, 76–80), however, has found another Afroasiatic root, *b-l with the more specific meaning “penis.” He places the Egyptian *b3h* “phallus” there. He sees the final -h “as an affix marking the semantic class of anatomical terms.” Thus, the Greek φαλ(λ)ός and

- the Thracian and Illyrian forms βαλλίον have two plausible etymologies: either from an Indo-European root or as a borrowing from Egyptian.
142. Frazer (1898, 4: 125). See also Gauthier (1925–31, 2: 62–3), and Gardiner (1947, 2: 48–9).
 143. *Theogony* 190–1. The Greek word *aphrós* has no Indo-European etymology. Possibly it derives from the Afroasiatic *>abar* “dust,” found in South Ethiopic Semitic and East Cushitic languages.
 144. *Theogony* 192–3. For the Semitic and Egyptian associations with the name and nature of Kythēra, see Vol. 1, 382 and Vol. 2, pp. 147–8. For the Semitic name of Cyprus see Chap. 4, n. 68, above.
 145. *Pyramid Texts*, 792. See Gardiner (1947, 2: 193).
 146. See Gardiner (1947, 2: 193).
 147. *Ibid.*, 56.
 148. These come from the ceramic period Middle Minoan III (MMIII) in the seventeenth century BCE. For descriptions, see Evans (1921–35, 1: 501–9).
 149. Described and illustrated in Evans (1921–15, 1: 502–4). For a full bibliography on this figure, see Phillips (1991, 518).
 150. Evans (1921–35, 1: 506).
 151. *Ibid.*, 509.
 152. Previous scholars have interpreted this as coming from the Wdyt nome, in Upper Egypt, but see Martin (1971, 39).
 153. For a thorough discussion of this provenance, see Phillips (1991, 519–23).
 154. Bennet (1980, 175, 237, n. 413).
 155. Pausanias 8.5.2.
 156. Bennet (1980, 1: 136).
 157. *Ibid.*, 139.
 158. Bennet (1980, 1: 226, n. 256).
 159. Aphrodite was not the only goddess known by this name. See Hemberg (1955, 7–8). For *wanassa* see Chap. 10, nn. 98–102, below.
 160. It has been claimed that W3d is related to the Semitic root $\sqrt{\text{wrq}}$ “yellow, green.” Takács lists the bibliography on this but denies the connection (1999, 319–20).
 161. Takács (2001, 56–63).
 162. Herodotos, 2.60, trans de Selincourt (1972, 153).
 163. Micah 1: 11.
 164. Gauthier (1925–31, 2: 97) and Pausanias, 1.2, 4, 8. For a similar folk etymology, see the discussion of the “mouse” Apollo in Chap. 13, nn. 21–3, below.
 165. Rundle Clark (1959, 56–9).
 166. *Book of the Coming Out by Day*, Spell 78.
 167. *Theogony*, 969.
 168. Exodus I: 11.
 169. Herodotos II: 158.
 170. Gauthier (1925–31, 2: 60–1). It was also known as Heroopolis. For the proposal that Pr Tm is also the origin of Python, see Chap. 19, nn. 113–7.
 171. As mentioned above, the only vocalization of the root $\sqrt{\text{pto}}$ as **pot* in *potmos* “fate” is better explained as coming from **p3 tm*.

172. Erman and Grapow; Loprieno (1995, 48).
173. See Vol. 1, 76; Jasanoff and Nussbaum (1996, 191); and Bernal (2001, 150–1). Also see Chap. 20, n. 142, below.
174. See Chap. 18, n. 96, for the plain's other name, Hē Orgas.
175. For this, see Chap. 7, n. 29.
176. See Vycichl (1983, 165).
177. *Iliad*, 12: 122, 181.
178. Vycichl (1983, 115).
179. For *r-d*, see Chap. 10, n. 157, below.
180. Chap. 10, n. 158.
181. Takács (1999, 138–9).
182. Vol. 2, 178–84.
183. For the Euroasiatic causative /s/, see Chap. 5, n. 64, above.
184. See Hoch (1997, 91–2 §75) and Allen (2000, 254–5 §19.10). Allen uses the term “subjunctive.”
185. Vycichl (1983, 209).
186. Chap. 14, n. 41, and Chap. 17, n. 5.
187. Benveniste (1973, 2: 50–5).
188. Vol. 1, 61.
189. Jasanoff and Nussbaum (1996, 198).
190. The alternatives include “offering” *sʾr*, “bringing in, giving” *m3ʾt*. Karenga (1994, 570–8).
191. Hesiod, *Works and Days*, 142.
192. Fick (1891, 282).
193. For this, see Vol. 1.

Chapter 10

MAJOR EGYPTIAN TERMS IN GREEK: PART 1

1. See Chap. 8, nn. 22–5.
2. Vycichl (1983, 145). For a similar dismissal, see Hornung ([1971] 1982, 41).
3. Meinhoff (1915, 8).
4. Vycichl (1983, 145–6).
5. Jasanoff and Nussbaum (1996, 187).
6. See Bernal (2001, 112–6).
7. While lexicographers agree that “cant” derives from *canare* as can be seen in the sense of “singsong” or “whining,” it is more likely that in the sense “jargon” or “secret language” it comes from the Irish *caint* pronounced *kānt* “talking, idiom.” This is a good example of a mixed etymology or “contamination.” Other examples of Irish words in English slang or cant include twig in the sense of “understand” from the Irish *tuig* “understand” and *gob* “mouth” from the Irish *gob* “beak.”
8. See Chap. 4, n. 89.
9. Chantraine (1968–75, 1: 90).
10. Antonio Loprieno thinks the change took place between Middle and Late Egyp-

- tian (1995, 38). Earlier instability, however, is indicated by the alternations *ptr/pty* “who, what” and *mtr/mty* “fame, renown” in Middle Egyptian.
11. For the Egyptian origin of these mysteries, see Foucart (1914) and Bernal (2001, 386–9).
 12. Pliny, 22: 121.
 13. See Chap. 15, n. 79, and Cauville (1997, 2: 33–4).
 14. Brugsch (1885–8, 1: 93).
 15. Hornung ([1971] 1982, 51–65).
 16. Assmann (1977, col. 759). *Hpr* is discussed in nn. 176–87, below, and in Chap. 19, nn. 74–5.
 17. Bonnet (1952, 120–1).
 18. Today we continue to place flowers on graves.
 19. See Parke (1977, 106–24).
 20. Fontenrose ([1959] 1980, 380–1).
 21. See Loret (1945, 1949).
 22. See Trask (1996, 349).
 23. Bass (1991; 1997, 87).
 24. So, too, do the Latin *figus* and the English “fig.” *Ficus* is generally accepted to be a loan from “an unknown language.” See, e.g., Ernout and Meillet.
 25. Lejeune ([1972] 1987, 54, 72–73) and Levin (1995, 235).
 26. For this uncertainty in Egyptian, see Loprieno (1995, 34). For the confusion in Semitic, see Moscati et al. (1969, 35–7) and Steiner (1977).
 27. This also appears to be the semantic field of the mysterious word ξουθός associated with *xánthos*, for which Chantraine has no etymology. The variation indicates a loan for both.
 28. *Iliad* 20: 74: 14.434; 21.2 and 24.693. For the specific link to Apollo through Skámandros, the river name “in the language of men,” see Chap. 7, n. 69, above.
 29. *Iliad* 6: 560; 21: 345–370. The Lycian Xánthos did not have these associations.
 30. *Iliad* 20: 39–40 and 73–4.
 31. *Iliad* 21: 325–82. See also, 22: 149–51.
 32. *Iliad* 8: 560.
 33. Chap. 7, n. 69.
 34. Chap. 19, n. 103.
 35. See Chap. 9, nn. 34–6.
 36. *Iliad* 23: 136–53.
 37. See Frazer (1914, 1: 388–93). I have been unable to find this coinage in Seltman (1933).
 38. See Frazer (1914, 1: 110–27), Van Berchem (1959–60, 73–109) and Moscati (1973).
 39. For immolations at the Babylonian New Year, see Saggs (1962, 366–7). For the rest, see Frazer (1913, 412–25).
 40. See Frazer (1914, 1: 116).
 41. Aristophanes, *Akharnians*, 1106.
 42. For the frequency of quail sacrifices in Middle and New Kingdom Egypt, see Weinstein (1973, 134–5).

43. Eudoxos, quoted by Athenaios, 9: 4.7, and Zenobios 5: 15. See Frazer (1914, 1: 112–3).
44. See Frazer (1914, 1: 112, 126).
45. Plato, *Timaeus* 68B.
46. *Hymn to Delos*, 1: 41. For these suggestions, see Mineur (1984, 87).
47. *Iliad* 1: 593–4 and Thucydides, 2: 98.
48. Chap. 16, n. 22.
49. Astour (1967a, 190).
50. Alongside the Satrai, ancient writers placed the Bessoi, whose name may come from *bsw “initiates” from the verb *bs* “initiate.” See Chap. 11, nn. 21–4.
51. Chap. 9, nn. 141.
52. See, for instance, Sesôstris from S n Wsrt.
53. Lejeune ([1972] 1987, 146–7 §143).
54. Vergote (1971, 47).
55. For an extended discussion of the bird envisioned, see Takács (2001, 4–6).
56. Gardiner (1957, 473).
57. Zabkar (1968, 131–53).
58. Vermeule (1979, 18, 65). She provides illustrations of Archaic and Classical human-headed funary birds. See her Chap. 1, figs. 13–4 and Chap. 3, fig. 11.
59. Vermeule (1979, 75).
60. Lewy (1895, 205).
61. Bérard (1927–9, 4: 382).
62. Vermeule (1979, 63, fig. 19).
63. *Odyssey* 12: l.159. For the Egyptian etymology, see Chap. 9, n. 178, above.
64. Vermeule (1979, 65).
65. See n.150, below.
66. Ecclesiastes, 12: 4.
67. See also Chap 11, n. 49.
68. Apollodoros 1: 8.3. and 3: 12.5.
69. Astour (1967a, 173–5).
70. Chap. 18, nn. 54–7.
71. Szemerényi (1974a, 148).
72. See terebinth above. Vycichl refers to a Beja word *u kunta* “bearing fruits, bitter yellow fruits.” He does not commit himself to this word being the origin of the Egyptian term. I see no reason why it should not be the reverse.
73. Erman and Grapow ([1926–53] 1982, 5: 89).
74. Symeonoglu has identified the spring (1985, 181).
75. Keramopoulos (1917, 320–1). The derivation of *pégē*, the word here used for “spring,” is from the Egyptian *pgʒ* “spurt out.” See Vol. 2: 94–5.
76. Hesiod *Theogony*, 187. Some ambiguity exists here because in the next line Cronus throws the genitals directly into the “surging sea.” From this act, of course, came Aphrodite. See Chap. 9, n. 123.
77. In Apollodoros (1921, 3: 8.1). Ocean has a daughter Meliboia. This name indicates neither ash nor water?
78. Pausanias, 9: 10.5.
79. Fontenrose ([1959] 1980, 319).

80. Pausanias 2: 38.2.
81. See the Homeric *Hymn to the Delian Apollo*, 18, 26 and 141, and Bruneau and Ducat (1965, 147–51). For more on Delos as the womb or birthplace of Apollo and Artemis, see Chap. 19, nn. 142–53.
82. Chap. 5, nn. 168–70. For the variants, see Mineur (1984, 58).
83. *Odyssey* 21: 295–305. For the etymology of Lapith, see Chap. 9, nn. 176–7, above.
84. *Iliad* 21: 832–4.
85. Gauthier (1925–31, 6: 24) suggests that, since these lands were all approximately to the east, they were associated with Ra as the rising sun. Given the huge geographical range involved, this seems unlikely.
86. Chap. 8, nn. 26–34.
87. Jasanoff and Nussbaum (1996, 196).
88. See Chap. 5, nn. 168–74.
89. Lee (1960); the article is cited in more detail in Bernal (2001, 133).
90. *Iliad*, 23: 78.
91. Parke (1977, 116–7).
92. See Kaplony (1980b).
93. Erman and Grapow ([1926–53] 1982, 5: 86–7). For the derivation of the Greek *χρή* “necessity,” from *ʕr(y)*, see Chap. 8, n. 55.
94. Bomhard and Kerns (1994, 521 §369).
95. It has continued in Christianity under the name of *crux ansata* “cross with handles.”
96. For a list of thirteen explanations, see Hodge (1995). See also Vycichl (1983, 250). For a recent restatement of the conventional view, see Allen (2000, 27).
97. Schwabe et al. (1982).
98. See Chap. 9, nn. 57–81.
99. Szemerényi (1979, 216). He was citing Frisk and Chantraine. He also mentions Dossin’s (1976) implausible suggestion that it is a Sumerian loan word and van Windekens’ (1948) proposals that it was cognate to the Middle Persian *vanak* “victorious.” Van Windekens abandoned that proposal in 1976 in favor of the Tocharian *Bənakte* “god” or *natak* “sire.” Interestingly, van Windekens provided no etymology for *anax* in his 1986 etymological dictionary. Does this indicate that he has abandoned his earlier hypotheses? The conventional view insisting on a Hellenic origin for such a crucial word. Wilamowitz-Moellendorff’s explanation indicates some discomfort. “*Fávaξ* must be an ancient Hellenic word from the first stratum” (1931–32, 140).
100. Szemerényi (1979, 216–7).
101. See Chap. 9, nn. 57–81.
102. Gardiner (1957, 295 §378). The formula was calqued into Hebrew as *hē phar’oh* “as pharaoh lives.” Genesis 42: 15, 16.
103. See Bernal (2001, 386–9). See Chap. 18, n. 123, below.
104. Plutarch (1914) Perikles in *Lives*, 13. See also Foucart (1914, 406–7) and Hornung (1999, 22–3).
105. See Guilmot (1977, 113–6).
106. *Odyssey* 21: 61.
107. Mayassis (1957, 42).

108. See Harrison (1903, 574–5).
109. Fragment from Clement of Alexandria, *Stromateis* 4 in Kinkel (1877, 78).
110. For the trope, see Froidefond (1971, 75–83).
111. Genesis 26: 19.
112. Lines 497–8. Also, the Greek verb ἐνέχω seems to derive from ἐν- ἐχω “hold in,” although Chantraine does not list ἐν as one of the prepositions used with ἔχω. The various meanings of the ἐνέχω and the stem ἐνέχυ- “pledge, security” would fit well with a central meaning of ῑnh “to link, imprison, bind” and, by extension, “oath.” In this instance, a double origin or what in traditional historical linguistics was called pejoratively “contamination” seems likely.
113. See Vol. 1, 76.
114. See McGready (1968, 250).
115. Moscati et al. (1969, 139–40), Rössler (1981, 688–9). See also Loprieno (1995, 65–6).
116. Vycichil (1983, 254).
117. Even Rendsburg (1989, 74) in his sympathetic review of my etymologies has difficulties with this correspondence.
118. See Bernal (1990, 107–8).
119. Gardiner (1947, 2: 48). For a discussion of the possibility that *Pr* ῑnh meant “university,” see Bernal (2001, 389). Vycichil (1983, 195) argues that the vocalization -a in *anš* meant that this referred to ῑnh as “tie” for documents, whereas ῑnh meaning “life.” would have been rendered conventionally as *ōnh. See also, Gardiner (1938).
120. Webster (1958, 11).
121. Astour (1967a, 359).
122. *Iliad* 6: 458.
123. Jernstedt (1953, 55–6).
124. Chantraine’s attempt to distinguish *mythos* from *épos* by insisting that the former meant “the content of words, opinion, thought” is not taken up by the other lexicographers.
125. Brugmann (1903–4, 501).
126. Pokorny seems to have accepted it at first and to have dropped it only at the last moment. His index lists it on the appropriate page but the word does not appear there.
127. As far as I know, this etymology was first proposed in print by Constantin Daniel (1968, 306) long before either I (1985, 76) or Théophile Obenga (1992, 84) made our proposals.
128. For -w, see Chap. 6, nn. 8–11.
129. There are also the words *sēbe* “reed, flute,” *sib* “worm, snake,” *sēb* “enemy” and *she* “gate, door.” These provide the themes of the *Magic Flute*, and its predecessor Wieland’s *Lulu oder die Zauberflöte*. It is possible that *zauber* “magic” was also included in the punning. I hope someday to write an article on this with my cousin John Eliot Gardiner.
130. Cicero (1945) *Tusculanae Disputationes* (5: 3.9).
131. Diogenes Laertius (1980) *Lives*, 1: 12, and Clement, *Stromateis* 1: 61.
132. Isokrates *Busiris*, 28. In a recent book Phiroze Vasunia (2001, 209) has argued

- that Isokrates' statement was made largely to attack Plato's attempt to monopolize the new term "philosophy." I see a problem with this view in that, given Plato's favorable view of Egypt, an Egyptian origin would enhance rather than diminish his new "discipline." For a discussion of these issues, see Vol. 1: 103–8.
133. For the derivation of *philō* from *mri*, see Chap. 8, n. 77, above. In Coptic texts, *philósophia* itself was translated *mntsafe*, that is *sabe* with the abstract prefix *mnt-*.
 134. Brugmann (1903–4, 499).
 135. It should be noted that the š- in šabaeans is not the Canaanite /š-/ (ts) but the "dark" /š-/ of the Arabic letter šād.
 136. Tardieu (1986).
 137. See Hornung (1999, 59). For the *Corpus Hermeticum* and its early transmission see Vol. 1, 130–50. For the image of Gnosticism, see Elukin (2002, 620).
 138. Burkert ([1977] 1985, 117).
 139. Hoch (1997, 50 §41).
 140. See Chap. 15, n. 134, below.
 141. Pausanias 10: 12.5.
 142. For my positive views on the accuracy of Egyptian astronomy, see Bernal (2001, 252–5).
 143. I am indebted to the late Carl Sagan for this information.
 144. This is discussed in more detail in Chap. 22, nn. 249–66.
 145. See Erman and Grapow ([1926–53] 1982, 5: 391). This definition indicates that among the ancients at least the Egyptians saw the sky as blue; *pace* Brown (1968b, 37–8).
 146. Lagarde (1866, 72 §182).
 147. Lewy (1895, 56).
 148. For the Egyptian etymologies of *speîra* and *moîra*, see below.
 149. Those making this attribution include Alexander Ephesius; Cicero in *De Republica* 6: 18; Aristotle in *Metaphysica*, 1073^b.18, *De Caelo* 286^b24, *Meteorologica* 341^b20, 354^b24; and others.
 150. A striking parallel exists between the Old Kingdom restriction of the Field of Rushes to pharaohs and the passage from the *Odyssey* (4: 561–70) in which the Egyptian seer Proteus assures Menelaus that he will go to Elysium not through merit but through his rank as the husband of Helen, hence the son-in-law of Zeus. Erwin Cook (1992, 254) points out the huge time span between the "democratization" of the Field of Rushes after the end of the Old Kingdom *circa* 2500 BCE and the Homeric text. He suggests plausibly that the old tradition had been preserved in Minoan Crete. For a summary of this scholarship, see Cook (1992); also see Alford (1991).
 151. Alford (1991, 155–61).
 152. The epic endings -îē or -ē fit well with a late borrowing from *Šḥ i3rw after the Egyptian shift ū>ē.
 153. Polybos "many cattle" is a common Homeric name for a rich man. There are many other examples of this name in the *Odyssey*.
 154. *Odyssey*, 8: 370–9.
 155. It is also the Nostratic *t^h al^v; see Bomhard and Kerns (1994, 281 §98).

156. For more on Greek borrowings from *pʿl*, see Chap. 14, nn. 38–9.
157. Cram (1938, 424).
158. Szemerényi (1966b, 41–2, and 1987 3: 1232–3). Τηλία “table with raised edge,” for which Chantraine has no etymology, fits this pattern.
159. Ernout and Meillet associate this with *moenia* “city protection.” I see this, too, as a probable loan from Semitic.
160. Orel and Stolbova (1995, 378 §1742). For the Haddiya form, see Leslau (1979, 3: 418).
161. For a bibliography of studies of “Maat,” see Lichtheim (1992, 205–7). Naturally, this does not include the 802-page thesis by Maulana Ndabezit Karenga, which was submitted in 1994.
162. Vycichl (1983, 105) estimates that during the New Kingdom the word had two pronunciations: *muaʿ with a short /u/ and *mūaʿ with the *u* long. I think both can be seen as rounded *mʷ*. For Egyptian rounded consonants in general, see Chap. 5, nn. 177–8, above.
163. See Chap. 5, n. 188.
164. Bury (1932, 18–9).
165. In the light of this description, it is difficult to understand Jan Assmann’s statement: “Maʿat meint ungefähre das Gegenteil von *moira*” (1993, 400).
166. The Μηρία (H) offered to the gods in Homer are generally thought to be thighs, and there is no doubt that this was, and is, the later sense of the word. In Homer, however, they seem to be the upper thighs, the haunches or hips. *Mēria* would seem less likely to come from an Indo-European root *memsra, found in the Latin *membra*, than from the Canaanite stem attested in Ugaritic as *mr>a* and in Hebrew as *mari>*. In these languages, it is translated as “fatling,” a term used almost exclusively in reference to sacrifice. It would in fact seem ultimately related to the root √mwr.
167. Pausanias 10: 24.4.
168. Wilson (1949).
169. See Chap. 9, nn. 188–90.
170. Krappe (1940, 245), Vermeule (1964, 72), Daniel (1962, 19) and Hemmerdinger (1968, 240).
171. Griffith (1997c, 231).
172. Chap. 8, n. 49.
173. The alternation μάκαρ and μάκᾱρ makes it possible that *makários* too had a long /ā/. Daniel (1962, 19), followed by Griffith (1997c, 231), has another explanation—that of the pronominal form *hara* of *hrw* found in Bohairic, the Coptic dialect spoken in the Delta closest to Greece.
174. For the convincing argument that this dream voice was a concoction by Penelope, who had recognized but not acknowledged, Odysseus, see Ahl and Roisman (1996, 252–4).
175. Bolling (1944, 47).
176. In his translation of the *Odyssey*, 2, 68, A. T. Murray (1919, 2:152) wrote, without citing any authority or reason, “θεῖος · οὐλός (divine=evil).”
177. Chap. 7, n. 73.

178. There are a number of interesting synonyms for *wn hr* as “dream,” including *rswt* “awakening” and *wpt mʕt* “to reveal the truth.”
179. It was generally used to translate φαίνειν.
180. For the shift w>u found in Coptic, see Loprieno (1995, 50).
181. For a discussion of these proposals, see Chantraine *hupar* and *hypnos*, s.v.
182. Another example of the same process would seem to be the Egyptian *h̄tm* “sealed, completed” and the Greek *hetoimos* “ready, realized, effective.” Transmission through Canaanite is attested in the Hebrew *h̄tām* “sealed, completed.” The exact form of the root is uncertain but it may have been through the future form *yih.tōm* with the aspiration being shifted to the initial. In any event, *h̄tām* provides a strong etymology for *hetoimos*, for which no Indo-European root has been found.
183. Zelig Harris (1939, 44) describes the Phoenician development of /ū/ as “late.” Segert (1997, 197) makes no such qualification. The only method for identifying early Phoenician vowels is from Akkadian cuneiform in which both /ō/ and /ū/ were written as *u*. Thus, the change could have taken place well before the attestation of /ū/ in Greek or Roman letters. A possible problem is that Phoenician also experienced a shift of short a > o. No one has determined whether this came before the shift /ō/ to long /ū/. This example would suggest that the shift short a > o came later and that the loan into Greek was made between the two shifts.
184. Vandersleyen (1986). Dreams could be spontaneous or deliberately provoked by “incubation,” sleeping in particular sacred places. After which specialized priests interpreted them. The historian of Egyptian medicine J. F. Nunn, who takes a minimalist view of Egyptian cultural achievements, says that Egyptian forms of incubation were derived from Greece (1996, 110–1). He does not refer to Vandersleyen’s sources. The latter writes, “this practice has been considered the fruit of a late development, because it is abundantly documented in the Ptolemaic epoch, particularly as a means of healing . . . in fact it seems that it was already at work, at least since the First Intermediate Period and in the New Kingdom.
185. Many of the references are, in fact, to dreams interpreted by Joseph in Egypt (Genesis 40–1).

Chapter 11

MAJOR EGYPTIAN TERMS IN GREEK: PART 2

1. *Hieroglyphica* 2: 4.
2. Lumpkin (1996).
3. See Chap. 9, nn. 42–3, above. Park (1994, 127–9).
4. Park (1994, 129). This corresponds with line 9 in the 18-point grid illustrated in Davis (1989, 22).
5. Chap. 9, nn. 122–3, above.
6. See Chap. 3, n. 44, above.
7. For an etymology of *niger*, see Bernal (1997c).
8. Laureano (1995, 44–8, 67).
9. For the mass of different renditions, see Vycichl (1983, 121–2).
10. Orel and Stolbova (1995, 387 §1786).
11. For the plausibility of the seventeenth- and eighteenth-century belief that the

- Sidonian cosmogonist Mochos and the Syrian philosopher Moschos should be identified with Moses, see Vol. 1, 143, 159–60, 469. I now believe, however, that I used misplaced precision in my ultra-late dating of the correspondence *s/skh*.
12. *Mons*, *Montis* is also found in Celtic and is perhaps related to the Basque *mendi* “mountain.” The consonantal root appears to be $\sqrt{mnt/d}$, a long way from $\sqrt{m(w)s}$.
 13. *Theogony* 60, 76, 104, 966, 1022; *Iliad* 2: 491, 598; 8: 488.
 14. *Pyramid Texts*, Utterance 269, trans. Faulkner (1969, 381–2). See Weingarten (1991, 10) and Phillips (1991, 194).
 15. Phillips (1991, 191).
 16. See Budge (1904, 2: 249) and Phillips (1991, 196–8).
 17. Weingarten (1991, 6).
 18. Ibid. and Phillips (1991, 201–5).
 19. Altenmüller (1975a).
 20. Eliade (1994, 23).
 21. Stracmans (1985) and Montes (2001, 198–9).
 22. *Bz as “protect” may well be the origin of the *bz* in the official title Wr bzt, guardian of the treasury. Pace Takács (2002, 295) who tentatively connects it to the Semitic *>bs/*>bš “fill with food.”
 23. Afroasiatic cognates for $\sqrt{bz}$ can be found in most of these meanings. See also Chap. 10, above, for a reference to Bessoi, from **bsw* initiates.
 24. Chantraine sees it as derived from $\pi\eta\gamma\nu\mu$ “fix.” This would be strange, although not impossible, for a moment of enlightenment, whereas *bs* “initiate” would be entirely appropriate for $\pi\acute{\alpha}\xi$ and for the Latin exclamation *pax* as well as the noun *pax/pacis* itself. Ernout and Meillet have great difficulties in providing an Indo-European etymology for this.
 25. Altenmüller (1975a).
 26. Ehret (1995, 89, no. 33).
 27. See Vol. 2, 166–71.
 28. This is not included in Gardiner’s sign list. Cervelló (1996, 79) brings out the links between terrifying lion masks and contemporary African rituals of circumcision and the demonic appearance of Bēs.
 29. Takács (2001, 293) also mentions the Somali *bōd* “gray horse,” and the Proto-Central-Khoisan “bize” “zebra.” Bize, with metathesis, provides a plausible etymology for the European “zebra” through the Portuguese in southern Africa. The conventional derivation of the word is “Ethiopian” is made less likely by the Amharic word for the animal: *yāmeda abəyya*.
 30. Takács (2001, 299).
 31. Evans (1921–35, 4: 431–40).
 32. Phillips (1991, 206).
 33. Ibid., 207–8.
 34. Burkert ([1977] 1985, 35).
 35. Hampe and Simon (1981, 191).
 36. Weingarten (1991, 11).
 37. Ibid., 11.
 38. Ibid., 14–5.
 39. Dodds (1951, 23).

40. Nilsson ([1941] 1967, 1: 201–3), cited in Dodds (1951, 23). Burkert ([1977] 1985, 180–1) shares Nilsson’s interpretation.
41. Psalms 17: 12.
42. *Phaedo*, 107d.
43. Burkert ([1977] 1985, 181).
44. Hampe and Simon (1981, 191).
45. For the standard, see also Chap. 10, nn. 72–3, above.
46. See Vol. 1, 67–8 and Chap. 19, nn. 88–110, below.
47. For the fifteenth-century reference, see Vol. 2: 433; for the Third Millennium date, see Vol. 2: 422.
48. Chap. 9, nn. 121–3, above.
49. Apollodoros 1: I, 6. For a bibliography on this name, see Frazer (1921, 1: 7, n. 3). For mourners as birds, see Chap. 10, n. 67–8.
50. For the use of honey in Egyptian medicine, see von Staden (1989, 13–4).
51. For the translation, see Lichtheim (1973–80, 1 [1975]: 168).
52. *Iliad* 9: 37–9.
53. Levin (1971b). Levin does not suggest distillation. The Arabic *qatr*, however, means “infuse, filter, refine” and *istaqtara*, also from the same root $\sqrt{\text{qtr}}$, is used as “distill.”
54. For many references to this conventional view, which he opposes, see Onians ([1951] 1988, 292).
55. Kallimakhos. *Hymn to Zeus* 49, and Virgil, *Georgics* 4: 152.
56. *Pyramid Texts*, Utterance 444, trans. Faulkner (1969, 148).
57. For *bit* belonging to a Proto-World root, see Chap. 4, nn. 96–100, above.
58. For a parallel structure, see Σμινθευς, discussed in Chap. 13, nn. 21–3, below.
59. Knossos 206 in Ventris and Chadwick (1973, 310). For “the site of the cave of Eileithyia,” see *Odyssey* 19: 198, trans. Murray (1919).
60. *Odyssey* 19: 198.
61. *Hymn to Artemis*, 21–5.
62. Bulloch (1989, 9–10).
63. Farnell (1895–1909, 2: 444, 609).
64. Kallimakhos, *Iambus* 12, trans., Trypanis (1958, 142–5).
65. *Hymn to Artemis*, 21–5.
66. Pausanias 1: 18.5, trans., Levi (1971, 1: 51).
67. Hampe and Simon (1981, 212).
68. Virgil, *Georgics* 4: 317–558.
69. Judges 14: 5–28.
70. *Odyssey* 13: 100. The word ἡεροφοῖδος translated as “shadowy” also means “misty.”
71. *Iliad* 11: 269.
72. If the Armenian word is related, the sound shifts could well have occurred after the loan, through Greek.
73. In this last sense, it was retained in Coptic *uōtn* (S) *uōten* (B). It is possible that *wdn* is cognate to the Semitic $\sqrt{\text{wld}}$ “give birth.” Orel and Stolbova (1995, 530 §2540) postulate this. There is also the East Cushitic root $\sqrt{\text{widy}}$. Within Afroasiatic the direction of the metathesis is impossible to detect. Evidence from Indo-European indicates that $\sqrt{\text{wld}}$ was the original form. See Chap. 9, nn. 11–4, above.

74. See Farnell (1895–1909, 2: 481).
75. Pindar, Fragment 123.
76. Another possibility is that *ššpw* derives from the -w nominalizing suffix attached to the verb *ššp* “take, receive, catch, or grasp,” “the catcher.” In this case *ššp* “statue” would derive from *ššpw* “sphinx.”
77. For a brief discussion of Oedipus and the Theban sphinx, see Bernal (2001, 335–6). See also Chap. 19, nn. 99–100, below.
78. See Farnell (1895–1909, 2: pl. 29b) and Hampe and Simon (1981, pll. 352 and 354). The sphinx found in the Temple of Artemis at Calydon, now in the Athens National Museum, is reproduced on the cover of their book. See also Chap. 10, n. 114, above.
79. *Iliad*, 21: 483, trans. Murray (1925, 443).
80. Chap. 3, nn. 74–6, above.
81. Budge (1904, 2: 249) and Evans (1921–35, 4: 435–7).
82. See Apollodoros, 3: 8.3 and Pausanias 8: 4.1.
83. Farnell (1895–1909, 2: 435–8).
84. *Ibid.*, 2: 436.
85. Hampe and Simon (1981, pl. 33).
86. See Farnell (1895–1909, Vol. 5, 459, 469). See also Pausanias, 9: 34. 3.
87. Aristophanes, *Ecclesiazusai* 974; Varro, 3: 16.7; and others.
88. Homeric *Hymn to Hermes*, 553–64, trans. Evelyn-White (1914, 403–5).
89. Orel and Stolbova (1995, 515–6 §§2457–60).
90. Astour (1969).
91. Farnell (1895–1909, 2: 427–8, pl. 29a).
92. See Astour (1969, 16).
93. Hampe and Simon (1981, 195).
94. *Iliad* 9: 530–40.
95. Altenmüller (1975a, col. 722).
96. A following line (35) Evelyn-White (1914) “but why all this of oak and stone?” is generally believed to mean “why talk of irrelevances?” but Professor O’Bryhim (1996) has shown that this phrase, although relatively common in Greek, is highly significant and has deep roots in Canaanite culture. It concerns divine power and oracular vision.
97. *Theogony*, 1–93, trans. Schmidt Wender (1973, 23–6).

Chapter 12

SIXTEEN MINOR ROOTS

1. Orel and Stolbova (1995, 537 §2578).
2. Vycichil (1983, 11).
3. Posener (1960, 40).
4. See Chap. 5, n. 132 and Chap. 9, n. 11, above.
5. Kagan (1965, 66–7).
6. See Chap. 11, n. 24, above, and Chap. 13, n. 34, below.
7. For the complications of this proposal, see Szemerényi (1974a, 154).
8. Chap. 8, n. 96.

9. Herodotos, 2: 49 and Diodorus, 1: 22.7. The latter appears to imply that the word φαλλός was Egyptian. Foucart (1904), *pace* Farnell (1909, 5: 173–7). Cult connections with Egypt were discussed in Chap. 9, nn. 139–41 and Chap. 10, nn. 50–1, above.
10. Hoch (1994, 174 §233).
11. For a clear discussion of this type of discrepant vocabulary, see Ehret (2002a, 4–10). For the Ik, see Turnbull (1972).
12. For these readings, see Vycichl (1983, 147).
13. It also has a negation ἀλάος “blind,” *pace* Chantraine.
14. Orel and Stolbova (1995, 393 §1820).
15. Ehret (2001, 318 §270). For others, see Takács (1999, 38–45). Ndigi (1993, 10) has also found a root *nū(n)* “to see” in the Bantu language Basa.
16. Laroche (1949, 260) argues that the Germanic form is the result of a prefix *ni-* before a root *em “to take” that is found in Germanic, Italic, Celtic and Balto-Slav. On grounds that I cannot grasp, he claims that this analysis of the Germanic *neman, makes “objections to a relationship between νέμω and the Gothic *niman* disappear.”
17. For these words and the sign’s connections with the Cretan labyrinth, see Vol. 2, 173–5.
18. See Davies and Schofield (1995, cover and pl.1). Bull leaping is represented in the determinative for the word *mētēn* “arena,” attested from the Old Kingdom centuries before the arrival of the bull cult in Crete.
19. Laroche (1949, 255) takes this view.
20. See Von Dienes and Westendorf (1961, 1: 480–1).
21. For a bibliography on this, see Bernal (2001, 437, n. 54, 439, n. 23).
22. Pisani (1950, 401; 1964, 117).
23. See Loprieno (1995, 47).
24. See Takács (1999, 155). I first published this etymology in (1997a, 91).
25. Chantraine refers to a hypothesis that *étai* may have been aspirated, but if this were so it would be impossible to sustain an etymology from *sweta.
26. See Chap. 9, n. 84, above.
27. See Dunkel (1981a, 139).
28. Laroche (1959, 96), Chadwick (1973, 26) and ten Cate and Houwink (1973, 141).
29. See Helck (1971, 354–7) for the appearance of the names Rk and P3 Rk, Lycian and “the Lycian.” Carleton Hodge (personal communication, Boston, 1981c) argued that the country and gentilic Rtnw meant the same thing.
30. Bryce (1980).
31. Tritsch (1976, 165).
32. See Gardiner (1957, 61) and Callendar (1975, 13); the latter reconstructs dāp*at, dāpawt or d*ap*at. See Chap. 5, n. 189, above.
33. See Chap. 5, n. 192, above.
34. Pherekydes 18a; Jacoby (1923–58). See also, Cook (1914, 1: 358) and Hornung (1999, 44).
35. See Bernal (1995a, 133; 2001, 305).
36. Bomhard and Kerns (1994, 314 §133).
37. Benveniste ([1969] 1973, 247–52).

38. Ventris and Chadwick (1973, 538). Lejeune (1965) argues that the word means both the land and the people.
39. Georgiev (1966, 235). The Lydian form is not in Gusmani (1964).
40. Chap. 8, n. 65, above.
41. Chap. 13, nn. 49–51, below.
42. See Chap. 8, n. 64.
43. Hoffmeier (1985, 23–4).

Chapter 13

SEMITIC SIBILANTS

1. See Hopkins (1976, 268) and Chap. 8, n. 47, above.
2. Moscati et al. (1969, 33–5).
3. For more details of my views on these issues, see Bernal (1990, 102–4).
4. A similar slippage of the vertical stroke occurred in the development of ϕ from φ . See Bernal (1990, 105–7).
5. See Chap. 10, n. 26, above.
6. For the value of x_i , see Chap. 10, n. 26, above.
7. This is complicated by the fact that *šōšan* derived from the Egyptian *sšn*.
8. Hopkins (1976, 268).
9. Chap. 8, nn. 47–69.
10. This comes from an Afroasiatic root *sol “quiet” also found in West Chadic. Orel and Stolbova (1995, 480 §2273).
11. *Politics* 1334a.
12. What appears to be a metathesis, *sahala* “shave off,” exists in Ge’ez and in the Tigrinya *sāhāla* and, elsewhere, in the Beja *sehal*.
13. Lewy (1895, 181). Curtius (1879, 196) saw a relationship between *skulaō* and *sulaō*, but assumed they were Indo-European.
14. Orel and Stolbova (1995, 485 §2304). Thus, it is clearly connected to their root §2244 *sim “to call, speak”; see Orel and Stolbova (1995, 473).
15. Bomhard constructs a Nostratic root *>in-im/>in-em “call, name” found in the Indo-European *(H)nēm̥/*(H)nōm̥/*(H)nóm̥ “name,” as well as in Uralic and Sumerian. Bomhard and Kerns (1994, 687–8, §569). He found no Afroasiatic examples. See, however, Chap. 5, n. 97 above.
16. Chap. 5, nn. 124–5, above.
17. For a discussion of the geography of the Greek Thebes and its mythological associations, see Vol. 2, 78–105. For Ismenos especially, see p. 99.
18. For a bibliography, see Astour (1967a, 213, n. 4).
19. For a list of ancient references to this famous cult, see Farnell (1895–1909, 4: 400–1).

Another root $\sqrt{\text{smn}}$ means “eight” and >Esmun was also seen as the “eighth” of the seven Kabiroi, beneficent smiths or dwarves! See Astour (1967a, 155). For a discussion of the etymology of Kabiroi from the Semitic *Kabbir* “great,” see Vol. 1: 483, n. 113 and Vol. 2: 629, n. 20. For a bibliography, see Astour (1967a, 155, 213). For Esmun, see Baudessin (1911).

20. Pausanias 3: 24.9.
21. Scholiast A, *Iliad* 1: 39.
22. See Farnell (1895–1909, 4: 164–5).
23. See Chap. 11, n. 58.
24. Chap. 10, n. 28–33, above.
25. Descriptions from the *Iliad*: εὔρροον, 7: 329; δῖος, 12: 21; and διότηρεφές, 21: 223.
26. Chap. 9, n. 173, above.
27. There are three mentions: *Iliad* 14: 434, 21: 2 and 24: 693.
28. Chap. 10, n. 28, above. *Iliad* 20: 39–40, 73–4.
29. Claiming that the final -n is secondary, Chantraine attempts to link it to the Lithuanian *su*.
30. Leslau (1979, 3: 549).
31. Pennacchietti (1981, 302).
32. Watkins (1986, 50).
33. Interestingly, Jasanoff and Nussbaum (1996, 198) do not resurrect this etymology in their attack on mine.
34. Ibid.
35. See Thompson (1947, 245–6). See also Chap. 19, n. 77, for the possibility of “contamination” from the Egyptian *hpr*.
36. Chap. 20, n. 43, below.
37. A good case can be made for reconstructing Proto-Nostratic *ʔ and emphatic *ʔ̤. A form illustrating the first can be seen in the parallel between the Semitic √šph “lip” and the Latin *labia/labra* and the Old English *līppa*, possibly also suggesting a plosive pʰ, hence, *PNost √ʔpʰ and PIE √IVpʰ. Steiner (1977, 111–22) has shown that the Arabic letter *ḏād* was an emphatic lateral fricative corresponding to an emphatic form of the Hebrew *šin*. Thus, the Hebrew √šhq-šhq “laugh” derives from a Proto-Semitic form retained in the Arabic √ḏhq. Steiner does not consider the possibility that these could be cognate to the Gothic *hlahjan* “laugh,” which is conventionally and dubiously related to the Late Latin *clangō* “bird cry.”
For the existence of laterals in Khoisan, see Güldemann and Vossen (2000, 107–8).
38. Ehret (1995, 9).
39. Steiner (1977, 57–122).
40. Ibid., 123–9.
41. Ibid., 137–43.
42. Leviticus 13: 2 and 24: 56; Ezra 13: 18 and Isaiah 3: 17.
43. For alternations, with or without -r- after the second consonant and the Calands “law,” see Chap. 8, n. 66, above.
44. Beekes (1971, 132).
45. Orel and Stolbova (1995, 354 §1632, 489, §2323).
46. Ehret (1995, 428 §888).
47. Moscati et al. (1969, 88).
48. Ehret (1995, 17) sees the Afroasiatic -m as an attributive or result suffix.
49. Orel and Stolbova (1995, 366 §1692).

50. Chap. 5, nn. 176–90, above.
51. Bochart (1674, I: 9: 417). See also Lewy (1895, 182).
52. The Egyptian etymologies of *στρατός* and *ἄρμος* were given in Chap. 12, nn. 26 and 36–9.
53. See Chap. 8, n. 66. For more discussion of this, see Bernal (2001, 140–2).
54. See Bernal (1990, 111).
55. Nussbaum (1976). All the more interesting that two decades later he and Jasanoff used Caland's Law to attack the etymology of *κύδος/κυδρός* Jasanoff and Nussbaum (1996, 141–2).
56. For the Euroasiatic, see Greenberg (2000, 200–2). For Semitic, see Moscati et al. (1969, 154) and, for Egyptian, see Loprieno (1995, 53–4). It is tempting to see the vocalic contrast between “fall” and “spill,” “part” and “split,” “tang” and “sting” and, possibly, “cramp” and “scrimp” as an additional causative marker. The Canaanite s/hiphil uses both.

Chapter 14

MORE SEMITIC LOANS INTO GREEK

1. Chap. 7, nn. 16–29, above.
2. Masson (1986a, 201). This statement is not true of Lewy's 1928 article.
3. Benveniste ([1935] 1948, 156).
4. Orel and Stolbova (1995, 39 §157). The root may be deeper still. Blench (in press a, 9) reconstructs a root #*b*wong “come” for Congo-Saharan. Most of the forms in both Nilo-Saharan and Niger Congo are simply **bV*. Saul Levin believes it probable that the Hebrew *bā*> derives from a “relatively late” borrowing from “an IE area where the labiovelar had [like Greek] been simplified in this particular manner.” This explanation seems far-fetched, and Levin admits that the wide distribution of **b*> within the Ethiopic Semitic languages makes it still more improbable. He sees the one example of the root **b*> outside Semitic, the Beja *bi*? as “presumably borrowed from Arabic” (1995, 159–60). He is unaware of the deep Afroasiatic and African roots mentioned above.
5. Jasanoff and Nussbaum (1996, 195).
6. Bomhard and Kerns (1994, 263 §72).
7. Orel and Stolbova (1995, 147 §637).
8. Liddell and Scott refer to the second sense as being employed “more commonly.”
9. Chap. 5, nn. 168–90, above.
10. Chap. 5, nn. 157–8, above.
11. Chantraine is not convinced of an etymology for this from an Indo-European root **g^wel* “swallow.” Pokorný (1959, 365) only finds it attested by the Greek *déleas*. It is also possible that the sense of *dólos* “trick” was influenced by a West Semitic form found in the Arabic *dal* “coquetry.” The semantic puzzle provided by the Latin words *doleo* “suffer,” *dolium* “pottery vessel” and *dolus* “trickery” can be explained by borrowings from the Canaanite **dvl* in the senses “depend, suspend and entangle,” either through Greek and South Italic languages or directly.
12. See, for instance, Sturtevant (1940, 91).

13. Bernal (1990, 120).
14. See Chap. 9, nn. 53–84. In addition to these, there are two titles P3 smtk (the negus vendor), used for the pharaoh Ψαμμητιχος, and P3 šhmty the double crown of Egypt as Ψεντ-.
15. Chap. 13, nn. 53–5, above.
16. Robertson Smith ([1894] 1972, 345).
17. Onians ([1951] 1988, 61–3).
18. Strangely, Chantraine himself notes that *haïma* probably replaced an earlier *éar*, which is attested in many other branches of Indo-European. See Bernal (1997a, 88, esp. n. 71).
19. Rendsburg (1989, 71). See Vol. 1, 59–60.
20. Orel and Stolbova (1995, 310 §1419).
21. Chap. 4, nn. 67–8, above.
22. Orel and Stolbova (1995, 292 §1328).
23. Isaiah 61: 7.
24. Chap. 4, nn. 66–8, above.
25. Chantraine denies any relationship of this word with the Akkadian *kallaka* often associated with “chalk.” He accepts the relationship with *kal.gā* “strong.”
26. Orel and Stolbova (1995, 359 §1655).
27. Even E. Masson (1967, 54–5) concedes that the Greek μύρρα (6) comes from the Ugaritic *mr*, Canaanite *mor* or *môr* and that λήδανον (5) comes from Semitic, the Akkadian *ladinu*, *ladunu*. See also Brown (1968a, 170–1; 1995, 331–2).
28. See Astour (1967a, 126).
29. For a discussion of this theme, see *ibid.* 137–8.
30. Muss-Arnolt (1892, 120, n. 30), Lewy (1895, 46) and, latest, Brown (1995, 332).
31. See Chap. 15, nn. 13–6, below.
32. *Odyssey*, 9: 97 and 102.
33. Orel and Stolbova (1995, 403 §1869). It is possible that this derives from the Nilo-Saharan root *nórǝh “drip from the body, flow slowly.” Ehret (2001, 319 §273).
34. Chap. 7, n. 96, above.
35. The suffix -eus is discussed in Chap. 6, nn. 8–10 and -ides in Chap. 9, n. 79.
36. See Chap. 4, n. 106, above.
37. Chap. 12, nn. 11–5, above.
38. Orel and Stolbova (1995, 410 §1907).
39. Jasanoff and Nussbaum (1996, 200). This is putting it mildly, Frisk describes the root as isolated and Chantraine admits his ignorance. Even the bold Van Windekens does not attempt to find Indo-European etymologies for *neōs* and *naïō*.
40. Exodus 15: 13. Rendsburg (1989, 77–8). Brown (2000, 43) described my proposal as “tempting.” Lewy (1928, 31–2) considered this etymology.
41. See Trask (1996, 61).
42. Chap. 10, nn. 117–8, above.
43. Schwyzler (1912, 443–5).
44. See Chap. 7, n. 17, and Corbett (1991, 80–1).
45. Rendsburg (1989, 77).

46. Jasanoff and Nussbaum (1996, 196–7).
47. Because of the precision possible in tracing phonetic developments within language families, a much higher degree of accuracy is required of etymologies establishing “genetic” relationships than is needed for loans between languages.
48. Bernal (2001, 141–2).
49. See Silius Italicus *Punica* 3: 17–20.
50. Pokorny admits that **elem* “elm” is only “possible.” Chantraine believes that the Armenian *elew-in* is “implausible.”
51. For the correspondence at/âh, see Harris (1936, 58).
52. *Iliad* 14: 465.
53. See Chap. 8, n. 3.
54. *Iliad* I: 16
55. One reason for the relative infrequency of $\sqrt{qsm}$ in the Bible is that astrology was so severely condemned as an abomination. See Deuteronomy 18: 10 and 2 Kings 17: 17.
56. Gordon (1965a, 1: 59).

Chapter 15

SOME EGYPTIAN AND SEMITIC CLUSTERS IN GREEK

1. These and the exceptions are referred to in Chap. 7, nn. 20–4.
2. See Chap. 7, nn. 40–1. D. W. Thompson’s (1947; 1966) excellent work also contains many Egyptian and Semitic etymologies for Greek fish and bird names.
3. Pliny 19: 5.30 .96 and Hemmerdinger (1970, 54).
4. Pierce (1971, 101).
5. Chap. 9, nn. 143–59.
6. Chap. 10, nn. 76–7.
7. Orel and Stolbova (1995, 377 §§1738–9).
8. Butzer (1976, 46).
9. For the Chadic cognate, see Orel and Stolbova (1995, 384 §1774).
10. Dévaud (1923, 87).
11. Chap. 9, n. 178.
12. Chap. 14, n. 32, above.
13. Daniel (1962, 16–8).
14. Herodotos 2: 92.
15. Lloyd (1976, 371).
16. Athenaios 3: 73.
17. Chap. 8, nn. 51–3.
18. For the root, see Orel and Stolbova (1995, 384 §1774).
19. W. H. Worrel (1934, 67) and Hemmerdinger (1968, 240). Vycichl (1983, 310) puzzlingly denied this possibility on the grounds of the relationship between *lilium* and *léirion*. He held that the Egyptian word was *šn* (for which see Chap. 16, n. 111).
20. Pierce (1971, 105).
21. Masson (1967, 58–60).
22. For the debate on this etymology, see Vol. 2, 484; Jasanoff and Nussbaum (1996, 199–200); and Bernal (2001, 145–6).

23. Both are probably related to the Chadic and Cushitic word *samf* “basket made of grass.” Orel and Stolbova (1995, 462 §2191).
24. Wiedemann (1883, 37).
25. See Hoch (1994, 255 §358).
26. Theophrastos *Historia Plantarum* 4: 8.5.
27. See Chap. 16, n. 111, below.
28. See Chap. 13, n. 9, above.
29. Erman-Grapow, 5: 11.
30. The Neo-Hebrew and Arabic terms for “reed” and “pen” seem to have derived from Greek, although it is remarkable that the root is $\sqrt{\text{qlm}}$ with the same initial as the Egyptian, not $\sqrt{\text{krm}}$, as it would be from Greek.
31. Daniel (1962, 22). Chap. 7, n. 20, above.
32. The Lernean Hydra, the Augean Stables, the Stymphalian Birds, and the Cattle of Geryon. For Herakles’ hydraulic achievements, see also Vol. 2: 116–9.
33. Servius, Commentary on *Aeneid* 6: 287.
34. See n. 8, above.
35. Lauriano (1995, 44, pl. 23; 48, pl. 29).
36. For this issue and a bibliography of the later scholars, see Takács (2001, 200–1).
37. Takács (2001, 201).
38. Meeks (1990, 46) objects that the sense “red” cannot come from Egyptian because, according to him, *bnw* means “grey.”
39. For the complications of this term, see Dienes and Westendorf (1961, 248–50).
40. Herodotos 2: 73.
41. These include Sethe (1908), Spiegelberg (1909, 142), Lloyd (1976, 317), Billigmeier (1977, 1–4) and Fournet (1989, 74). At least in later times, *Bnw* was also the name of the planet Venus.
42. See Kákosy (1982, col. 1030).
43. Astour (1965).
44. This still leaves *Fnhw* unexplained.
45. Another Akkadian variant, *nurmû*, was the source of the Hittite *nurmû* and the Hurrian *nuranti*. Hoch (1994, 24–5 §12).
46. Jablonsky (1804, 272) and Wiedemann (1883, 37).
47. This appears to be derived from a Nostratic root $\sqrt{\text{t}^{\text{p}}}$ found in the Germanic “top” and “tip.” Bomhard (1994, 97) insists that the Egyptian reflex of the Nostratic and Proto-Afroasiatic emphatic /t’/ is /d/. Takács, however, provides examples where PAA /t’/ became /t/ in Egyptian (1999, 231–4).
48. *Iliad* 2: 765.
49. For the “authorities,” see Wiedemann (1883, 26) and Hemmerdinger (1968, 244). Even Pierce accepts it (1971, 104).
50. Chap. 8, nn. 35–6, above.
51. Hani (1976, 314–18).
52. Herodotos, 2: 94.
53. Wiedemann (1883, 26), Muss-Arnolt (1892, 112) and Hemmerdinger (1968, 242). They point out the Semitic forms *qiq* and *qiqāyon*. See also the survey on the subject by Alan Lloyd (1976, 2: 380). For the complications see Lloyd and Fournet (1989, 61).

54. Chap. 9, n. 52. Lesko, 2nd ed., now includes *ḏbṣw*.
55. Chap. 10, n. 24.
56. See Wehr (1976, 238).
57. Lagarde (1866, 2: 356); Lewy (1895, 20).
58. Muss-Arnolt (1892, 107).
59. Pokorny (1959, 1085–6).
60. Levin (1971a, 28, 119, 686).
61. Varro, 5 and 10.
62. Astour (1967a, 140–4).
63. With the last meaning, some confusion arises with *ṣḥt*, which also means “field, arable land.” Later derivations from this root were discussed earlier in this chapter; see n. 3, above.
64. *Odyssey* 9: 116–36. Chantraine mistakenly refers to 9: 166.
65. For these, see Foucart (1914) and Bernal (2001, 387–9).
66. For a bibliography on this plain, see Frazer (1898, 2: 514–5).
67. Homeric *Hymn to Demeter*, 450–8.
68. Pokorny (1959, 1138).
69. Jernstedt (1953, 100–2).
70. For a discussion of *r(e)udh and its possible origin in Sumerian, see Chap. 4, n. 66.
71. Plutarch, *Pericles*, 27.
72. Aristotle *Peri tōn Pythagoreōn*, quoted in Diogenes Laertius, 8: 34.
73. See Takács (1999, 215). The word is not in Orel and Stolbova.
74. Chap. 10, n. 12.
75. Later borrowings of *smṣ* in the compound *smṣ tṣ* were the origins of *sēma* and *sōma*. See Chap. 5, nn. 124–5, above.
76. See Vol. 1, 453, n. 16.
77. Chap. 8, n. 50, above.
78. *Iliad* 11: 631; 13: 322 and 21: 76. *Works and Days* 597–9.
79. Rundle-Clark (1959, 118).
80. See Vol. 2, 483.
81. Not in Orel and Stolbova but demonstrated in Tak (1999, 82).
82. This is the conventional view but von Dienes and Grapow are not convinced (1959, 1: 25).
83. It is possible that this form appears in Mycenaean since the abbreviation for “goat” is *a₃* (ai). See Ventris and Chadwick (1973, 536).
84. I am grateful to Elspeth McDougal for explaining this refrain to me in Henley on Thames in the spring of 1944.
85. It was rendered γᾱδερ in the Septuagint.
86. Chantraine strengthens the Indo-European claim by the Attic-aspirated form *hathróos*. From the Egyptian side this could result from confusion between *idr* and *htr* “span” of horses.
87. *Sinuhe* B119', see Gardiner (1947, 2: 261).
88. See Chap. 8, n. 54, above.
89. See Pokorny (1959, 445).
90. Chap. 8, n. 65.

91. Chap. 9, nn. 51–3.
92. Orel and Stolbova (1995, 419 §1952) and Takács (2001, 379–84).
93. Orel and Stolbova (1995, 413 §1923).
94. All contain /i / as does the Bohairic *pēri*.
95. Chap. 5, nn. 85–7, above.
96. Schmidt (1922, 104).
97. Orel and Stolbova (1995, 531 §2550), note the tent-like determinative for *wrmwt*; this is not in Gardiner.
98. Chap. 8, nn. 70–90, above.
99. It is also possible that Varuṇa too took his name from *wrmwt*.
100. Nilsson (1972, 229).
101. *Iliad* 15: 192–5.
102. *Iliad* 1: 195, 221, 497.
103. See *Odyssey* 20: 103, 113.
104. Sophokles, *Oedipus Tyrannus*, 1088. See also Quasimodo (1983, 168).
105. Chap. 9, n. 99, above.
106. Daniel (1967, 386).
107. Chap. 5, n. 96–118, above.
108. Chap. 5, nn. 119–27.
109. Chap. 10, nn. 75–7.
110. See n. 29.
111. Chap. 12, nn. 16–9, above.
112. Chap. 8, n. 47, above.
113. Pace Vycichl, who insists that *kabi* is exclusively a measure for beer.
114. See n. 73.
115. See Klein (1987).
116. Masson (1967, 42–4).
117. Mayer (1960b, 316).
118. Chap. 9, n. 192.
119. This was also used for “oasis,” a usage mentioned above nn. 6–7.
120. *Lopós* belongs to the Semitic cluster around *lēpōo*, discussed in Chap. 13, n. 52, above.
121. See Chap. 18, nn. 33–6, above.
122. Vol. 2, 298–304.
123. Chap. 9, nn. 21–5, above.
124. Chap. 9, n. 20, above.
125. Vycichl accepts the Indo-Europeanist view that the Germanic **kōka*, or **kaka* “cake” are independent, and the lack of earlier Egyptian or Afroasiatic cognates to *kk* makes it unlikely that **kk* was a Nostratic root.
126. Wiedemann (1883, 22).
127. See nn. 5–6 in this chapter.
128. Athenaios, 11: 470.
129. Muss-Arnolt (1892, 91, n. 10). I have been able to find this word only in the plural *htw*.
130. Thompson (1947, 37).
131. Daniel (1967, 381–2); Athenaios, 11: 784.

132. Chap. 9, nn. 19, 26, 56.
133. Chap. 7, n. 111.
134. Hoch (1994, 170–1).
135. Cited by Hoch (1994, 171, n. 210).
136. Chap. 10, nn. 12–3.
137. Vol. 2, 483–4.
138. Aristotle, *Historia Animalium*, 606^a24.
139. See Lesko (1984, 2: 153).
140. Chap. 9, nn. 52–3.
141. Orel and Stolbova (1995, 355 §1636).
142. Chap. 3, n. 46.
143. Szemerényi (1981, 115).
144. Strabo, 17, 2.5.
145. Wiedemann (1883, 27) and Hemmerdinger (1968, 241), cited by Chantraine.
146. Herodotos, 2: 86
147. See Chap. 11, n. 52.
148. Vol. 2, 115–6. See also references in Griffith (1993).
149. Szemerényi (1971, 669).
150. For a survey of this idea and a bibliography, see Bernal (2001, 263–6).
151. Von Deines and Westendorf (1961, 20–1).
152. For the original sense of “spinal column,” see Onians (1951, 204–6).
153. See Chap. 10, n. 97.
154. *imʒḥ* is a probable etymon for ἰμβηρίς “eel,” for which Chantraine has no explanation.
155. See Chap. 12, nn. 16–9.
156. Von Deines and Westendorf (1961, 129–33).
157. Chap. 8, n. 66.
158. Chap. 5, n. 109.
159. Von Deines and Westendorf (1961, 156).
160. The root has already been deprived of the example *akmē*. See Chap. 5, n. 108.
161. *Odyssey*, 4: 227–32.
162. See Coldstream (1977, 147–8). The nature of the third consonant in *drakhmē* is very uncertain: -ss-/ -tt- and g/kh. Nevertheless, it is predominantly a velar. This considerably weakens an Egyptian derivation from *dʒt* “hand, handful,” despite the semantic excellence of such a derivation.
163. Orel and Stolbova (1995, 187 §826; 190 §841).
164. For *wfʒ*, see Von Deines and Westendorf (1961, 183).
165. Gardiner (1947, 2: 249).
166. Orel and Stolbova (1995, 391 §1806).
167. Vycichl (1983, 107); Chap. 9, nn. 110–5, above.
168. Von Deines and Westendorf (1961, 129).
169. Vycichl (1983, 125).
170. Chap. 9, n. 179; Chap. 10, nn. 157–8.
171. Jernstedt (1953, 69–73).
172. Orel and Stolbova (1995, 286 §1300). Vycichl (1983, 183).
173. Von Deines and Westendorf (1962, 729).

- 174. Ibid., 736.
- 175. For *shn*, see Gardiner (1947, 2: 254).
- 176. Von Deines and Westendorf (1962, 858).
- 177. For the origin of *pseud-*, see Chap. 14, n. 15.
- 178. See Hoch (1994, 302 §436).
- 179. Pausanias 1: 31.5.
- 180. N.167, above.
- 181. Orel and Stolbova (1995, 173 §760; 144–5 §626 and 152 §660).
- 182. See Chap. 16, n. 33, below.

Chapter 16

SEMANTIC CLUSTERS: WARFARE, HUNTING AND SHIPPING

- 1. Masson (1986a, 201).
- 2. Frisk mentions other possibilities: “hanger, suspended sword” based on the supposition that the word derived from ἀείρω “raise, suspend.”
- 3. *Theogony*, 283.
- 4. Chap. 15, nn. 77–8.
- 5. Is this the origin of Darth Vader?
- 6. Chap. 6, nn. 8–12.
- 7. Chap. 9, n. 20.
- 8. Hoch (1994, 120–1 §153).
- 9. See Vol. 2, 174.
- 10. Chap. 9, n. 49.
- 11. Jasanoff and Nussbaum (1996, 199).
- 12. See Hemmerdinger (1968, 239).
- 13. See Chap. 8, n. 20.
- 14. I previously discussed the etymology of *xīphos* in Vol. 2: 370–2. For the derivation of the Greek *sēpia* “cuttlefish,” see Vol. 2: 370.
- 15. Vol. 2: 369, 605.
- 16. Szemerényi (1966, 36). His parallel with *kapnós* “smoke, smell of cooking” is even more unreliable than he supposes in that it has a plausible Egyptian etymology in *qfn* “bake.” See Chap. 15, n. 140.
- 17. Bietak (1979, 241–4).
- 18. See Hampe and Simon (1981, 116, pll. 172–7).
- 19. See Vol. 2, 367–9.
- 20. See Hemmerdinger (1968, 239).
- 21. Chap. 15, n. 174.
- 22. Apollodoros, 3, 16, 2.
- 23. Chap. 12, n. 26.
- 24. Orel and Stolbova (1995, 337 §1550).
- 25. Herodotos 2: 164. For a discussion, see Lloyd (1976, 2: 187).
- 26. Decker (1984).
- 27. Chap. 5, n. 126.
- 28. Orel and Stolbova (1995, 148 §644).
- 29. Chap. 8, nn. 35–6.

30. *Theogony* 161, trans. Evelyn-White (1914, 91).
31. For a discussion and references on the alternation C/Cr and “Caland’s law,” see Chap. 8, n. 66.
32. Orel and Stolbova (1995, 152 §660).
33. Vicychl (1983, 221).
34. Schulze (1892, 86.1).
35. *Odyssey* 24: 515.
36. *Iliad* 2: 212–44.
37. Harrison (1921, 413) quoted in Astour (1967a, 193).
38. There is, of course, the difference between the Semitic >*aleph* and the Semitic ‘*ayin*. There have, however, been exchanges between them. Furthermore, it is also possible that the throwing stick ʾ(T14), which is only used in these words, did not have an initial ‘*ayin*.
39. Szemerényi (1974a, 147–56).
40. *Ibid.*, 150.
41. *Twelfth Night*, Act I, Scene 3.
42. Orel and Stolbova (1995, 16 §57).
43. See Astour (1967a, 84).
44. See also Vol. 2, 139–40.
45. It may be related to the Egyptian *i3kw* “old age.”
46. Such a borrowing would have to be late as the Arabic /š/ generally derived from Proto-Semitic s², the Canaanite /š/.
47. Orel and Stolbova (1995, 65 §259).
48. Mayer (1967, 287).
49. Chap. 9, n. 134, above.
50. Ellenbogen (1962, 49).
51. Muss-Arnolt (1892, 64, n. 7).
52. Orel and Stolbova (1995, 194 §860).
53. Szemerényi (1974a, 148).
54. Isaiah, 19: 17
55. Chap. 14, nn. 16–9, above.
56. Here I contradict the claim I made in Vol. 2: 140 that the Semitic *ḥômāh* derived from the Greek *klōma*.
57. Vol. 1: 51 and Bernal (2001, 72, 153).
58. Brugmann (1911–2, 231).
59. See Chap. 5, nn. 157–8.
60. Lagarde (1866, 2: 356) and Lewy (1895, 179). Lewy was less certain when he returned to the word in (1928, 29–30).
61. Chap. 8, nn. 7–10, above.
62. For artificial jawbones as sickles, see Chap. 2, n. 46, above.
63. Judges, 15: 16. Cromwell, Letter 5/7/1644, quoted in Carlyle (1908, 1: 151).
64. Szemerényi (1981, 114).
65. See Bernal (2001, 136).
66. Chap. 3, n. 72, above, and Chap. 21, n. 54–70, below.
67. Chap. 8, n. 64, above.

68. Vol. 1, 60. Chantraine writes that *mekhri* “could” correspond to the Armenian *merj* “close.”
69. Chap. 7, n. 26, above.
70. It is also possible that the mysterious and unexplained Latin *merda* “shit” comes from the same root.
71. Pokorny (1959, §764).
72. Orel and Stolbova (1995, 416 §1938).
73. Bomhard and Kerns (1994, 230 §35).
74. Chap. 18, nn. 37–41, above.
75. Chap. 4, nn. 100–2, above.
76. Chap. 8, nn. 42–5, above.
77. For a bibliography, see Brown (1995, 65–70).
78. Rabin (1974).
79. Brown (1995, 70).
80. Levin (1995, 234–7).
81. The reconstruction *plg is from Vycichl (1983, 159).
82. It is interesting to consider the possibility that the double signs šš and šš sometimes represented the fricative lateral /š/ found in Semitic.
83. I also discussed this etymology in Vol. 2: 272–3.
84. Σφάζω was discussed in Chap. 8, n. 56, above.
85. Rapallo (1970).
86. Chap. 17, n. 74, below.
87. Lewy (1928, 29–30).
88. Jonah, 2: 7.
89. Masson (1967, 91).
90. Chap. 13, n. 12, above.
91. Rapallo (1970, 390).
92. See n. 2, above.
93. Chap. 7, nn. 26–7, above.
94. See n. 61, above, and Chap. 8, nn. 8–11, above.
95. See, for example, Apollodorus 3: 15, 16.
96. Reproduced in Hampe and Simon (1981, ill. 28).
97. Chap. 21, nn. 68–9, below.
98. Chap. 12, nn. 24–5, above.
99. For a discussion, see Vol. 2, 346–8.
100. Chap. 12, n. 26, above.
101. Vol. 2, 13.
102. Chantraine (1956, 11) referring to these names would only concede *thalassa* as a loan. For my arguments on *thalassa*, see Chap. 8, nn. 41–4, above. I presented my arguments on *pelagos* in the present chapter; see n. 76, above.
103. Chantraine’s confused attempts to find an Indo-European etymology for *isthmos* include a link to εἶμι “go” and the Old Norse *eið* “isthmus.”
104. See Vol. 2, 252.
105. See Vol. 2, 301.
106. See Vol. 1, 263.

107. Chap. 9, n. 38, above.
108. Pollux, 10: 166.
109. For a bibliography, see Vycichl (1983) and Szemerényi (1971, 674).
110. Chap. 8, n. 47, above.
111. Chap. 15, n. 27, above.
112. Gordon (1955, 63); Szemerényi (1971b, 652).
113. Chap. 17, n. 73, below. See also Mineur (1984, 264) for the use of *topeia* in rituals.
114. Spiegelberg (1907, 129).
115. E. Masson (1967, 88).
116. Chap. 5, nn. 159–61, above.
117. *Odyssey*, 21: 391.
118. Orel and Stolbova (1995, 221 §§979–80).
119. Masson (1967, 39–42).
120. Cf. Lewy (1895, 151, 210).
121. Orel and Stolbova (1995, 214 §§947–8).
122. Chap. 15, n. 73. It should be noted that *gilgāl* mentioned there is clearly a reduplication of *g(o)l.
123. See Vol. 1, 483, n. 113; Vol. 2, 629, n. 20. In this volume, see Chap. 19, n. 192, below.
124. Szemerényi (1974a, 149).
125. Chap. 7, nn. 75–6, above.
126. Szemerényi (1977, 3).
127. Szemerényi (1974a, 149).
128. See n. 40, above.
129. Judges 12: 6.
130. Chap. 4, nn. 106–7, above.

Chapter 17

SEMANTIC CLUSTERS: SOCIETY, POLITICS, LAW AND ABSTRACTION

1. Vol. 2, 258–61.
2. *Iliad* 18: 410; 21: 395.
3. Černý (1943). Vycichl (1983, p. 210) disagrees and reconstructs a form *a3āba. The Greek borrowing with an /o/ tends to strengthen Černý's position.
4. Szemerényi (1974a, 154).
5. Chap. 9, n. 186; see also Chap. 14, n. 41.
6. Chap. 6, nn. 17–21, above.
7. Bomhard and Kerns (1994, 664–5, §542). Pokorný (1959, 700) and Orel and Stolbova (1995, 373 §1722).
8. Chap. 8, n. 90.
9. Jernstedt (1953, 54–5).
10. Vol. 2, 418–9.
11. Chap. 18, n. 16.
12. Chap. 5, n. 126. See also Chap. 16, n. 23.
13. Chap. 8, nn. 90–2.

14. Chap. 5, nn. 160–7.
15. Orel and Stolbova (1995, 60 §240).
16. Lewy (1895, 68).
17. E. Masson (1969, 98).
18. Chap. 14, n. 15.
19. Chap. 14, n. 10.
20. E. Masson (1969, 22–4).
21. Chap. 13, nn. 48–52.
22. Chap. 14, nn. 32–3.
23. Chap. 7, nn. 28–9.
24. Lewy (1895, 111).
25. Meyer (1962), cited in Chantraine.
26. Numbers 25: 18.
27. I must confess that this etymology came to me from Frankie Howard in “Up Pompeii.”
28. Chap. 13, nn. 53–5.
29. Chap. 8, nn. 92–5.
30. Chap. 13, nn. 32–4.
31. For more on those origins, see Chap. 13, nn. 10–1.
32. Chap. 18, n. 53.
33. Chap. 12, nn. 3–6.
34. Chap. 9, nn. 15–7.
35. Chap. 8, n. 64.
36. Chap. 9, nn. 57–81.
37. *Iliad* 1: 320; for the description see, *Odyssey* 19: 245.
38. Chap. 8, nn. 65–6.
39. Chap. 16, nn. 44–5.
40. Chap. 5, n. 157.
41. *Odyssey* 15: 419.
42. Chap. 14, n. 52.
43. See Bernal (2001, 345–70).
44. See Bernal (2001, 341).
45. *Iliad* 5: 880, 897.
46. *Iliad* 2: 455, 9: 436, 11: 155; *Odyssey* 16: 29, 23: 303.
47. Chap. 10, n. 122.
48. Orel and Stolbova (1995, 433–7).
49. Gardiner (1961, 270). In Vol. 2, 104–5, I argue for parallels between the goddess Onka ṇqt and the divine Alkmēnē ṛq, illustrating a similar phonetic correspondence.
50. See Vol. 1, 171. See also Jernstedt (1953, 25, 61–2) and Bernal (2001, 341).
51. Chap. 10, n. 168.
52. Chap. 12, nn. 16–9.
53. Chap. 8, nn. 4–6.
54. N. 37 above.
55. For a detailed description of the site, see Frazer (1898, 2: 375–8). See, also, Kourouniotes and Thompson (1932).
56. Gardiner (1957, 497).

57. See Smyth (1956, 181D).
58. Chap. 9, nn. 187–8.
59. Chap. 15, nn. 32–5.
60. See Chap. 5, n. 108.
61. Chap. 10, n. 122.
62. Chap. 3, n. 66.
63. Vol. 2, 484; Bernal (2001, 145–6). The latter was in response to Jasanoff and Nussbaum (1996, 199).
64. See Pokorny (1959, 720).
65. See nn. 51–2, above.
66. Chap. 12, nn. 11–5.
67. Chap. 10, nn. 155–7.
68. See Kadish (1993).
69. See Chap. 10, nn. 125–33.
70. Vicychl (1983, 203).
71. Chap. 10, n. 152.
72. Chap. 8, n. 45.
73. Chap. 12, n. 37; Chap. 15, n. 45.
74. E. Masson (1967, 47–8).
75. Chap. 14, nn. 53–6; Chap. 8, n. 3.
76. Szemerényi (1981, 113).

Chapter 18

RELIGIOUS TERMINOLOGY

1. Chap. 5, n. 125.
2. For the Semitic origin of *bainō*, see Chap. 14, nn. 3–4.
3. Levin (1995, 163, nn. 71–2) points out another interesting similarity: in both cases the initial vowel is not reduced as one might regularly expect.
4. Cuny (1910, 161) and Albright (1957). The derivation was accepted by Mayer (1960a, 91). E. Masson (1967, 7) specifically denied it, without stating her reasons for doing so. Vaughan and Cohen (1976) and Klein (1987) all accept the derivation.
5. See Brown (1995, 201).
6. Ibid., 32, 201.
7. Levin (1995, 161–2). Rendsburg (1989, 75) makes the same point.
8. See Chap. 7, n. 28, above.
9. See Rundle Clark (1959, 37–41).
10. Chap. 14, nn. 39–40 and Chap. 12, n. 43, above.
11. Orel and Stolbova (1995, 168 §734).
12. For Thebes, see Vol. 2, 78–153. For the Kabeiroi, see Vol. 1, 483, n. 113; Vol. 2, 629, n. 20. Also see Chap. 16, n. 123 and Chap. 19, n. 192, in this volume.
13. Bochart (1646, 1.1: 365). See also Lewy (1895, 93–4).
14. Masson (1967, 88, 117). See also Vol. 1, 50.
15. A possible Egyptian etymology for *thólos* is *dwʕt* in the sense of “nether chamber

- nor a tomb.” Apart from the slight semantic distance, however, no correspondence initial d-th can be confirmed, although a medial one can be confirmed.
16. See Farnell (1895–1909, 2: 666).
 17. Vermeule (1979, 69). I also quoted this passage in Bernal (2001, 76).
 18. Chap. 9, n. 26.
 19. Chap. 5, n. 125.
 20. Vol. 2, 174–5.
 21. Note the rendering of the Egyptian -w- as a Greek -oi-, which suggests a rounded liquid.
 22. Orel and Stolbova (1995, 309 §1414).
 23. Pokorny (1959, 248).
 24. Clackson (1994, 120–1).
 25. For a view that *taphos* came from an earlier Pelasgian Indo-European stratum while *tumbos* was Hellenic, see Hester (1965, 379).
 26. II Kings 23: 10–1. Whether Molech was a god or a ritual is a subject for debate among biblical scholars. For a survey, see A.R.W. Green (1975, 179–87).
 27. The vocalizations *ō*-e of both *mōlek* and *tōpet* may merely reflect that of *bōšet* “shame.”
 28. Griffith (1927, 197, n. 2).
 29. See Hoch (1997, 50 §41,2).
 30. Chamoux (1953); Vitali (1932).
 31. See *Iliad* 15: 727.
 32. For -eus, see Chap. 6, nn. 8–12, above.
 33. A late pronunciation of *i3i* could also be the origin of the mysterious term ḥtε used to address Phoibos Apollo (*Iliad* 15: 365, 10: 152).
 34. *i3i* referred to in connection with dit *i3i/dra3i* in Chap. 9, n. 186.
 35. Szemerényi (1958, 174; 1974b, 50).
 36. Chap. 17, n. 44.
 37. Kretschmer (1927, 76–8). See Vol. 2, 119–20. In that volume I misspelled the name as Hēbat.
 38. Orel and Stolbova (1995, 324 §1486).
 39. See Chap. 8, n. 45, above.
 40. Chap. 17, n. 12.
 41. Chap. 5, n. 126.
 42. See Chap. 10, nn. 69–70.
 43. See Gamkrelidze and Ivanov (1995, 17).
 44. Orel and Stolbova (1995, 339 §1558).
 45. For the Nilo-Saharan and Niger-Congo, see Ehret (2001, 122 §268).
 46. Chap. 10, nn. 11, 103.
 47. Lewy (1928, 27–9).
 48. Astour (1967a, 187–8); Brown (1969, 168–70); (1995, 156–8).
 49. Szemerényi (1971b, 675).
 50. See the chart in Vycichl (1983, 65).
 51. Harrison (1921, 413).
 52. Astour (1967a, 192–3).

53. The parallel with the Egyptian *rd*, Coptic *ṛt* with the same meaning, is intriguing. Could the coincidence be the result of a common Nostratic origin, a loan or chance?
54. See Takács (1999, 142).
55. Another likely loan from *rmi*/λείβω is λιβρός “dark blood of sacrifices.” Pausanias (9: 2.5) reported legends about a town called Λιβέθρα north of Olympos. It was destroyed by a flood caused by waters pouring down from heaven.
56. Astour (1967a, 174–5).
57. Chap. 10, 67–9.
58. Holst-Warhaft (2000, esp. 6–9).
59. Judges 11: 37–40.
60. See vivid illustrations of this in Davies and Gardiner (1936, 2: pll. 63, 72) and described in (3: 120–1, 136–8). For the introduction of the elegy, see Loraux (1986).
61. Chap. 15, nn. 81–2.
62. Chap. 15, nn. 120–1.
63. Orel and Stolbova (467 §2214).
64. Chap. 17, n. 1.
65. Chap. 15, n. 127; Chap. 8, n. 69.
66. See Chap. 15, nn. 106–8.
67. There is a tantalizing parallel between ἀμῦμων (H) “noble” literally “without blame,” an epithet Homer applies to the Ethiopians whom Zeus visits (*Illiad*, 1: 423) and the Ethiopians well-known adoration of Zeus’ counterpart Am(m)on, Amoun.
68. Levin (1995, 170).
69. Harrison (1903, 503).
70. These verbs were mentioned above in connection with the name of the poet Hesiod. See Chap. 11, nn. 95–6.
71. Sethe (1899, 1: 157); Cerny (1976, 296).
72. There is also a late word ᾄσις “singing, song.” See Liddell and Scott.
73. Liddell and Scott.
74. See Vol. 1, 127. For a discussion of this apotheosis through drowning or being eaten by crocodiles, see Griffith (1909).
75. *Pyramid Texts* 24d, 615d and 766. See Griffiths (1975, 298, 317, 357) and Breasted (1908, 18). For the Demotic name Hasje and the Greek Ασῆς, see Spiegleberg (1901, 7).
76. Griffiths (1975, 431–2).
77. Plutarch, *De Iside* 35: 364e.
78. Heliodoros, *Aithiopika* 2: 27.
79. Hoch (1994, 78–9 §87).
80. Chap. 1, nn. 20–1.
81. Jernstedt (1953, 26–7).
82. See Chap. 9, n. 56; Chap. 13, n. 56 and Chap. 15, nn. 34–5.
83. Chap. 10, nn. 5–20, nn. 21–46.
84. Chap. 14, n. 27.
85. Chap. 11, n. 53.
86. Chap. 9, nn. 21–25; Chap. 10, nn. 5–53; and Chap. 14, nn. 44–7.

87. The existence of Arabic and Sabaeen words *hgn* meaning precisely the opposite “unclean” etc.—the constant double edge of “sacred”—indicates that the triliteral is well rooted in Asiatic Semitic and, therefore, the Canaanite and Aramaic forms are very unlikely to be loans from Greek.
88. See Bernal (2001, 339).
89. For the Egyptian attestations, see Ranke (1935, 1: 326–7) and Junker (1917, 107).
90. The Ugaritic divinity of the sun, Sps who was feminine, presumably through Hurrian influence, may have received her name from an amalgam of *sapsi* with the Semitic *šemes* “sun.” Astour (1967a, 103, n. 1) linked the Ugaritic title to the ancient name of Mount Arakhneion in the Argolid, which according to Pausanias (2: 25, 10) was Sapiselaton. While he is undoubtedly right to see the second element as the Semitic *>elat* “goddess,” the whole would seem more likely to be an Egypto-Canaanite doublet **saps->elat*, “sacred goddess,” possibly Athena as the patron of “weaving” and the later name Arakhneion “spider.”
91. Loprieno (1995, 46).
92. A. B. Cook (1914–40, 1: 346–70, 428).
93. Chap. 9, nn. 140–1; Chap. 10, nn. 50–1.
94. It is possible that *wšg* is related to the Afroasiatic roots **og* “to dig” and **og* “to shout” constructed by Orel and Stolbova (1995, 248 §§1106–7).
95. Chap. 9, nn. 143–59.
96. Chap. 9, n. 174.
97. See Szemerényi (1964b, 219–29).
98. Hani (1976, 174).
99. Dionisiaca 19: 2. 1–104
100. Chap. 21, nn. 88–109.
101. Lefkowitz (1997a, 248).
102. Assmann (1989, 154–5). For his belief that there were multiple layers of restricted religious knowledge, see Assman (1970). For further evidence of these links, see Merkelbach (1987), Baines (1990, 14), Delia (1992, 181–90) and Derchain (1962, 175–98).
103. My views in this respect are very orthodox. Marvin Meyer (1987, 158), the editor of a standard book on Ancient Mysteries, sees the obvious connection between the *Book of the Dead* and Egyptian and Hellenistic initiations.
104. Stricker (1950; 1953); and Guilmot (1977, 95–175).
105. Griffiths (1975, 31).
106. See Snodgrass (1971, 116–7).
107. See Foucart (1914). For information on this respect, I acknowledge personal communication from Kevin Clinton, Cornell, autumn 1988. Clinton (1997a, 249) has claimed that the Hellenistic Isis mysteries were formed on Greek models. Unlike Paul Foucart, whose son Georges was an Egyptologist and who had a considerable knowledge of Ancient Egypt, Clinton has virtually no special knowledge of the civilization.
108. Picard (1927, 324).
109. Barb (1971, 152).
110. Hani (1976, 9).

111. See Frankfort (1933); Guilmot (1977, 100–3).
112. Montet (1946, 298–300), Guilmot (1977, 124–5).
113. Varille (1954, 131–2).
114. Chantraine is almost certainly right to dismiss the idea that it came from the initiate's need to close or half close his eyes.
115. Levy (1866, 2: 55, col. 2); Keller (1877, 356).
116. Fischer (1881, 568, col. 2). Muss-Arnolt who is skeptical of the Semitic etymology quotes Fischer's statement with approval (1892, 53).
117. Zenodotos, quoted by Athenaios 3: 96a, quoted by Farnell (1895–1909, 2: 756).
118. Psalms 139: 15.
119. ἱστορία (5) “enquiry, written information, history,” can be plausibly derived from another Semitic verb $\sqrt{\text{str}}$ “to write” a document. The exact form is not certain but it could be from the Niphal infinitive construct *hisâtêr*.
120. For a detailed study of the centrally important Egyptian concept of (s)st3 “hidden, secret,” see Rydstrom (1994).
121. Erman Grapow 4: 554 attests it six times.
122. Griffiths (1982a).
123. See Chap. 10, nn. 11, 104–5.
124. See Chap. 11, n. 24.
125. See Chap. 10, nn. 157–8.
126. For a detailed discussion of this item, see Chassinat (1966–8, 495–7, 587–95). See also Griffiths (1975, 222) and Guilmot (1977, 115).
127. *Protrepticus*, trans. Butterworth (1968, 43).
128. Chassinat (1966–8, 774, cols. 122–3).
129. *De Iside*, 39: 366D, trans. Griffiths (1970, 181). Vycichl wrote a thoughtful note on the Coptic borrowing from the Greek *kibōtos* “coffer, box.” He pointed out that the Greek word has no etymology but is likely to have been borrowed from Semitic and cites the Hebrew *tēba* “coffer, box” (for the relationship of this word with the city name of Thebes, see Chap. 19, below). Vycichl noted an Old Egyptian word *tb* “cage, case for birds” from which he reconstructed a form *kiba or *kuba, which he saw as “very close to the Greek word. Černý attempted to explain the Coptic words *taibe* and *tēbe* “coffin, shrine, chest.” He was inclined to see them as deriving from two Egyptian roots *db3t* “shrine coffin” and *dbt* “chest, box.” Vycichl's conclusion is that although “the links cannot be formally demonstrated, the use of sufficiently similar words . . . speaks rather in favor of a common origin.”
130. Apuleius, *Golden Ass*, 11.275 trans. Griffiths (1975, 83).
131. Clement of Alexandria, *Protrepticus* 2.18.
132. Denderah inscriptions trans. Chassinat (1966–8, 774, cols. 122–4).
133. Pokorný (1959, 611). Chantraine gives no etymology for *klōthō*, although the Egyptian *k3wt* “craft, profession” is a possibility.
134. For the determinative see Faulkner.
135. Vycichl (1983, 80).
136. Griffiths (1975, 223–4).
137. This illustrates the case for different reflections of the same word caused by phonetic change. The case was made in Chap. 10, n. 7.
138. Even accepting the form *ciss* or *cess*, a loan is more likely. Final vowels fell away

- very early in Old Irish and final -st became -s, which in turn was uncertain in Ogam inscriptions and disappeared in later Irish. See Thurneysen (1949, 110 §177). Thus, the preservation of the geminated -ss would seem to indicate a borrowing from the Latin *cista*.
139. Orel and Stolbova (1995, 317 §1454).
 140. The Coptic *kōōs* appears as γόος (H) “funeral lament” from which the verb γοάω “to lament” derived. Chantraine distinguishes this from βοάω “call” and tries to link *gōos* to *kaujan, a Germanic form for “name, call.”
 141. *Hymn to Demeter*, 151–5.
 142. See Plutarch, “De Exilio,” 17; Pausanias 1: 38.2 and Lucian “Demonax,” 34.
 143. Apollodoros, 3: 15.4.
 144. Diodoros, 1: 29.4. Trans. Oldfather.
 145. Apollodoros, 3: 14.7. For a discussion of the dates, see Burton (1972, 125). Consistently with her general inclination, she prefers a northern origin for the mysteries to an Egyptian or Creten one.
 146. See Witt (1971, 52).
 147. *Odyssey* 15: 225–6; 11: 291–4.
 148. Pherekydes fr. 24, in C. Müller (1841–70, 1: 74f) and Herodotos 9: 35.
 149. See Vol. 1, 88–103.
 150. Herodotos 2: 49.
 151. Clement, *Protrepticus* 2: 13.
 152. Astour (1967a, 239). The Arabic *ṛāḥā* and the Ge’ez *ṛf* mean “stitch together.” This form provides a plausible etymology for the Greek ῥάπτω “sew.” The discovery of a Mycenaean form *erapamena* has ruined previous attempts to establish an Indo-European etymology.
 153. Landau (1958, 80). On p. 215, however, he follows Chadwick’s identification with the Persian tribe Maraphioi.
 154. Pausanias 1: 43.5. See *Inscriptiones Graecae*, 7: 223–4.
 155. Cook (1914–20, 2: 544).
 156. Foucart (1914, 149).
 157. Pausanias 1: 2.4, trans. Frazer (1898, 1: 3). The blaspheming villain was, as usual, Alcibiades. For a bibliography on the house and Dionysos Melpomenos, see Frazer (1898, 2: 50).
 158. Frisk states, “without an etymology” and goes on to list some hypotheses he does not accept. Chantraine writes that phonetically “it seems to have an Indo-European origin” but simply cites, without comment, some of those referred to by Frisk. Both scholars are skeptical of Szemerényi’s attempt (1954, 159–65) to link it to μέλος “music.” This word too has no Indo-European etymology. It would seem plausible to derive it from an Egyptian root *mr, possibly attested in *mrt* “female singer, musician” (Erman and Grapow, 2: 107) and certainly found in *Mrt*, a goddess of music.
 159. Pokorny (1959, 753) links it to a root *mer* “shimmer, sparkle.” Chantraine tentatively accepts a relationship with the Latin *fōrma* despite the necessity of metathesis and difficulties with the long *ō*. He also admits that Ernout sees *fōrma* as a borrowing from *morf-* possibly through Etruscan. In short, both scholars see both words as loans.

160. *Odyssey*, 7: 170; 9: 367.
161. Ovid, *Metamorphoses*, 21: 633–74.
162. *Odyssey*, 4, 385–460.
163. Griffiths (1975, 236–7).
164. Apuleius, *Metamorphoses* 11: 13.
165. Griffiths (1960, 102, 116).
166. *Hymn to Demeter*, 275–81.
167. Diodorus, 1: 25, 2–6, trans. Oldfather (1933).
168. *Pyramid Text*, Utterance, 365.
169. See Burton (1972, 109); Harris (1971, 112–37).
170. See Foucart (1914); Bernal (2001, 386–9).
171. Chap. 17, n. 37.
172. Bérard (1894).

Chapter 19

DIVINE NAMES: GODS, MYTHICAL CREATURES, HEROES

1. Herodotos 2: 50. See the discussion in Vol. 1, 98–101.
2. Griffin (1986, 4).
3. Chap. 5, nn. 103–7.
4. Müller (1830 1: 284–91), trans. H. Tufnell and G. C. Lewis. For more on K. O. Müller, see Vol. 1, 308–16; Blok (1996, 705–24; 1997, 173–208) and Bernal (2001, 190–6).
5. Farnell (1895–1909, 4: 136). For Max Müller, see Chaudhuri (1974).
6. For debate and compromise in the late nineteenth century, see Farnell (1895–1909, 4: 136, n.a); for the twentieth century, see Burkert (1985, 406, n. 55).
7. See Farnell (1895–1909, 4: 136) and Burkert (1985 149). For K. O. Müller’s “Aryanism,” see Vol. 1, 308–16; Blok (1996) and Bernal (2001, 190–6).
8. See Farnell (1895–1909, 4: 101–2). He denies this meaning and believes that they probably simply came from northern Greece.
9. Hudson (1931, 27–52, esp. 28–32).
10. See Lubec et al. (1993); Biel (1985) and Good (1995, 959–68).
11. See the dictionaries of Frisk and Chantraine; Fontenrose ([1959] 1980, 406); Nilsson (1967, 1: 527–59).
12. Frisk (1955–72) gives all these forms with references.
13. Burkert (1985, 405, n. 14).
14. *Ibid.*, 144.
15. Dietrich (1974, 240, n. 276).
16. *Iliad* 20: 39. Burkert (1985, 145).
17. Interestingly, ip in this sense appears associated with Horus, in *Pyramid Texts* 766: in the clause “Horus has caused the gods to assemble for you. . . .” Faulkner (1969, 140, Utt. 423).
18. See Chap. 21, n. 132.
19. Burkert (1985, 149).
20. Chap. 9, n. 5.
21. *Iliad* 5: 401, 899–904.

22. *Odyssey*, 4: 2: 230–2. See Chaps. 4, n. 58, and Chap. 9, n. 5.
23. Von Beckerath (1980).
24. Hesiod frg. in scholiast to *Iliad* 4: 232.
25. See te Velde (1980).
26. *Iliad* 4: 1: 101. This is Farnell's interpretation (1895–1909, 4: 119).
27. See Chap. 4, n. 37.
28. A. T. Murray (1924, 1: 160, n. 1) referred to these possibilities. He chose “wolf-born.”
29. *Iliad* 4: 90–101; 1: 36–9.
30. Farnell (1895–1909, 4: 121).
31. *Ibid.*, 112–8. Burkert (1983, 87–9) sees a survival or revival of this practice in the worship of Zeus Lykaie at Megalopolis in Arkadia.
32. *Ibid.*, 114, n.a. He deplores this interpretation.
33. *Iliad* 4: 1: 101.
34. *Odyssey* 14: 1: 162; 19: 1: 307.
35. For bibliographies, see Frisk and Chantraine and Szemerényi (1974a, 151).
36. This is Chantraine's favorite but Frisk is not persuaded. See, also, Austin (1975, 281, n. 6).
37. Szemerényi (1974a, 151). In Chap. 22, n. 242 I shall argue that Mount **Λυκαβηττός** to the east of Athens derives its name from the Egyptian toponym *ḫt iḫbt* “luminous region in the east, where the sun rises.” Wilamowitz-Moellendorff (1927, 43, n. 2) argued that “it is difficult to separate *lykabas* from *Lykabēttos*.” In this case *lykabas* would mean “dawn” which would fit the action of the epic and Penelope's insistence on early morning in the verses following Odysseus's second use of the term (19: 306).
38. Wilamowitz-Moellendorff (1927, 43–4), and Murray (1934, 210–2).
39. Austin (1975, 245).
40. *Ibid.*, 240–5.
41. Martin West (1997, 432) suggests that this image may have drawn on reports of Amenhotep II riding past four bronze axes and shooting through all of them.
42. See Nilsson (1927, 443, n. 1).
43. The calendrical aspects are reflected in the epithets **Ὠριμέδων** and **Ὠρίτης** of the hours, cited by Farnell (1895–1909, 4: 139).
44. *Odyssey* 12: 2: 340–403.
45. For Odysseus as traveler, see Apollodoros, *Epit* 39; Pausanias 8: 12: 5.
46. *Great Eoiae*, frg. 16. For my support of the ancient tradition that Hesiod preceded Homer, see Vol. 1, 86–8.
47. Farnell (1895–1909, 4: 141, n.c).
48. The derivation of the name *Odysseus* from the Egyptian *wḏyt* “campaign expedition, journey” was discussed in Chap. 16, n. 6.
49. The Akkadian name for Mercury d/mul/te muštarīlu could be related to the Arabic *muštarī* “buyer.” The complication comes from the fact that in Arabic planetary terms Muštarī is Jupiter. See Bobrova and Militarev (1993, 319–20).
50. Chap. 10, n. 152.
51. See Vol. 1, 141–3.
52. Lloyd (1970, 94).

53. Sverdlow (1999, 276) writes, “The most difficult, and impressive, accomplishment in Babylonian planetary theory, second only to the lunar theory, is that for the heliacal phenomena of Mercury.”
54. Lloyd (1973, 65).
55. *Hymn to Hermes*, 569.
56. Herodotos (2: 144).
57. See Chap. 9, nn. 21–5.
58. Schenkel (1980, col. 14).
59. *Iliad*, 15: 236–8. In a similar situation Athena is likened not to a falcon but to a harpy (19: 350).
60. *Odyssey* 15: 526.
61. For *anax hekaergos*, see *Iliad* 15: 253; *Odyssey* 8: 323. For *anax dios huios*, see *Iliad* 7: 47 and 20: 104; *Odyssey*, 8: 334. For *anax*, see *Iliad* 1: 36, 9: 559, 16: 514.
62. Chap. 10, n. 102.
63. The earliest identification is with Peribsen, the fifth pharaoh of the Second Dynasty. Kaplony (1980a, col. 59).
64. Gardiner (1957, 72, excursus A).
65. Pausanias 2: 30.6, tr. Frazer (1898, 1: 118).
66. Pausanias 2: 31.9, tr. Frazer (1898, 1: 120). For more on Pittheus, see Chap. 22, n. 219, below.
67. Frazer (1898, 3: 276).
68. Rundle Clark (1959, 218–30) and Westendorf (1980a).
69. Rundle Clark (1959, 224–22) and Westendorf (1980a).
70. See, e.g., *Iliad* 1: 49; 10: 515.
71. Apollonios, *Argonautica* 4: 1710; tr. E. V. Rieu (1971) as *Voyage of the Argo*.
72. Griffiths (1980a, col. 55; 1980b).
73. Budge (1904, 1: 349–58; 444–50); Mercer (1949, 262–3); and Schenkel (1980a, col. 14).
74. *Book of Coming Forth by Day* 17: 116, quoted in Budge (1904, 1: 470–1) and Mercer (1949, 184).
75. Rundle Clark (1959, 40–2).
76. Chap. 9, n. 5.
77. For the possibility of “contamination” from the Semitic $\sqrt{\text{srp}}$ “stinging beast,” see Chap. 13, n. 35. See also the renditions of /h/ in Chap. 8, nn. 48–68.
78. See Astour (1967a, 316).
79. Wildung (1975; 1980).
80. Astour (1967a, 314–6).
81. *Ibid.*, 316–7.
82. *Ibid.*, 306.
83. For bibliographies on Egyptian influence on Greek medicine, see Bernal (1992, 599, n. 15; 2001, 437, n. 54). See also Shavit (2001, 119).
84. Farnell (1895–1909, 4: 235–40).
85. Hesiod, frg. 63; from scholiast on Pindar *Pyth* 3: 14; Pausanias 2: 26.6; and Astour (1967a, 307).
86. Chap. 9, nn. 161–3.
87. Budge (1904, 1: 446); Otto (1975e).

88. Cited in Farnell (1895–1909, 2: 460).
89. Pausanias 1: 31.4.
90. For collected references, see Farnell (1895–1909, 2: 574).
91. Pausanias 8: 15.9 [not 15.5 as in Farnell (1895–1909, 2: 574)].
92. For Aithopia and the other epithets, see Farnell (1895–1909, 2: 457–8).
93. For Lukeia, see Pausanias 2: 31.6.
94. *Book of Coming Forth by Day*, cited in Erman and Grapow, 1: 126, n. 5.
95. *Iliad* 9: 533; *Odyssey* 5: 123. See also Chap. 11, n. 94.
96. *Iliad* 1: 611 and *Hymn to Aphrodite* 218; 225.
97. Unas 1: 558, quoted in Budge (1904, 2: 1). This text is apparently what is now listed as Utt. 301: 1.447. Faulkner (1969, 90) does not see the Δ referred to by Budge. For identification of Ra with Hr 3ḥty, see Morenz (1973, 267).
98. See Chap. 11, nn. 76–7; Budge (1904, 1: 471–2); and Mercer (1949, 246).
99. See McGready (1968, 250); also see Chap. 11, n. 76, above.
100. Budge (1904, 1: 471–2) and Mercer (1949, 246). For Hr(y) Tm, see Schafer (1902, 96).
101. See Vol. 2, 499.
102. See *Ibid.*, 98–9.
103. *Ibid.*, 106–20.
104. *Ibid.*, 497; 629, n. 11.
105. Chap. 14, nn. 26–32.
106. Takács (1999, 141).
107. Astour (1967a, 128–39).
108. *Ibid.*, 139.
109. Vol. 2, 119–20.
110. Astour (1967a, 103, n. 1).
111. For a thorough treatment of this myth, see Fontenrose ([1959] 1980).
112. Strabo 9: 419.
113. Chap. 9, nn. 168–70.
114. See *ibid.*, nn. 161–3.
115. *Ibid.*, n. 171.
116. This identification was challenged but is now confirmed. See Holladay (1982).
117. Naville (1888, 8); Redford (1982, col. 1055).
118. *Book of Coming Forth by Day*, Spell 175.
119. Hornung (1982, 67) quoted in Bernal (2001, 391). On that page I also discuss Anthony Preus’s interesting and plausible suggestion that the Greek *atom* derives from Atum not *a-tom* “indivisibility.”
120. Hornung (1982, 178; 1999, 128). The symbol survived in Gnostic literature and in the seventeenth century CE was revived as the sign ∞ “infinity.”
121. In figure 18 (164), Hornung presents the Ouroboros as set on two lions, indications of Atum.
122. For parallel legends in other cultures, see Fontenrose ([1959] 1980, 121–216).
123. See Gauthier (1925–31, 2: 60). See also Chap. 9, n. 171, above.
124. Farnell (1895–1909, 2: 579).
125. *Homeric Hymn* 3: 356.
126. Chap. 9, nn. 48–9, 176–7.

127. Chap. 15, 140–1.
128. Fontenrose ([1959] 1980, 59).
129. See Vol. 2, 373–7.
130. Budge (1904, 1: 472).
131. See the bibliography in Fontenrose ([1959] 1980, 310, n. 65).
132. *Oedipus Tyrannus*, 1: 161; Pausanias 9: 17.1.
133. Plutarch, *Aristides*, 20, cited in Frazer (1898, 5: 56).
134. See Hampe and Simon (1981, pll. 450–1).
135. Gaster (1961, 110–4). Hvidberg-Hansen (1979, 1: 91–4) has added other parallels between the two. These parallels do not exclude close relationships among ‘Anat, Neith and Athena; see Chap. 22, below. Hvidberg-Hansen refers to a joint cult of ‘Anat and Athena at Idalion in Cyprus (1979, 1: 84–7).
136. See Astour (1967a, 180). For a discussion of the translations of this text, see Hvidberg-Hansen (1979, 1: 92).
137. For a bibliography of these, see Frazer (1898, 5: 139).
138. Ibid. and Frazer (1921, 1: 347, n. 2).
139. *Myth of Ra and Isis* translated with slightly different wordings by Budge (1904, 1: 352, 354). Budge first published this riddle in 1895.
140. Samson, whose name derives from the Semitic $\sqrt{\text{sms}}$ “sun” has a similar ebb and flow of strength.
141. See in particular, Vol. 2, 78–153.
142. Leslau (1979, 3: 476).
143. See Fontenrose ([1959] 1980, 374–7).
144. Aristotle *De Generatione Animalia*, 776 a: 10.
145. Chap. 11, nn. 60–1.
146. Chap. 10, nn. 81–2.
147. *Homeric Hymn to the Delian Apollo*, 1: 18. For a discussion of the name Phoibos in the context of the babies’ purification by water, see Chap. 9, nn. 21–2.
148. Hesiod, *Theogony* 2: 406–9. See Bing (1988, 101). For Leto as “veiled,” see Chap. 14, n. 29.
149. *Hymn to Delos* 1: 273.
150. Budge (1904, 1: 156–8).
151. Virgil *Aeneid* 3: 79, trans. Jackson Knight (1958, 77).
152. Strabo 10: 5.5.
153. Thucydides 3: 104.2.
154. Rny/*ră?ne provides an excellent etymology for the verbal element ‘pŋn “sheep or lamb.” Chantraine denies any connection to the Germanic or Celtic *ren in *reindeer* but does not give any alternative.
155. Herodotos 2: 156.
156. *Hymn to Delian Apollo*, 117.
157. Chap. 10, n. 81.
158. See Bing (1988, 137, nn. 89–90).
159. Bobrova and Militarev (1993, 317).
160. Apollo Amyklai is discussed in Chap. 21, nn. 88–96.
161. For Aphrodite, see Chap. 9, nn. 128–37; for Hermes, Chap. 21; and for Athena, Chap. 22.

162. See Junker (1917).
163. Ventris and Chadwick (1973, 127).
164. For the complications among Egyptian, West Semitic and Greek gods, see Bernal (2001, 303–4).
165. Pausanias 2: 31.2–3, tr. Frazer (1898, 1: 119).
166. Pausanias 2: 31.4, tr. Frazer (1898, 1: 119).
167. For a translation of the text, see Lichtheim (1975, 51–7). See also Junge and Luft (1973) in which they attempt to portray this document as a pseudepigraphon of the Twenty-fifth Dynasty. Schlögl (1980, 110–7) follows Murray (1949, 47) in arguing for a compromise New Kingdom date. Lichtheim (1980, 56). I am less confident of modern *Besserwisserei*, which denies the statement by Shabaka, of the Twenty-fifth Dynasty, that the text was old before he ordered it inscribed on stone. I am inclined to follow the compromise. For the tongue, see *Book of Coming Forth by Day*, Spell 82. For the “writings,” see Budge (1904, 1: 502). T.G. Allen (1974) has three translated versions of the spell Budge cites (145); none contain this term.
168. Scholiast to Pindar *Pythian Ode* 9.53, frg 36 in Race (1997, 2: 237). For Pindar’s enthusiasm for Ammon, see Pausanias 9: 6.1. For the connections among the oracles at Dodona, Siwa and Thebes, see Herodotos, 2: 53–7; *pace* the skepticism of A. Lloyd (1976, 251–4).
169. Burkert (1985, 125–6).
170. See Otto (1975b, col. 243) and the figure on Budge (1904, 2: 4).
171. Cited by Otto (1975b, col. 243).
172. Chap. 6, n. 12.
173. Ventris and Chadwick (1973, 125).
174. For these, see Chap. 9, n. 167.
175. Jay Jasanoff has accepted this etymology, personal communication, Cornell, 1985.
176. Vol. 2, 171.
177. *Ibid.*, 298–302.
178. Chap. 15, n. 99 and Chap. 8, nn. 35–6.
179. See Chap. 8, n. 50.
180. For a discussion of the Indo-European etymology, see Vol. 1, 67.
181. See Vol. 2, 97–9.
182. Chap. 14, nn. 34–5.
183. Vol. 2, 106–20.
184. Chap. 5, nn. 163–7; Chap. 11, nn. 59–63 and Chap. 21, nn. 54–71. Herodotos 2: 50.
185. The Latin *Antonius* can plausibly be derived from >ādōnī “my lord.”
186. Vol. 1, 71–2.
187. Vol. 2, 114–5.
188. *Iliad* 1: 2: 399–405. See also Chap. 7, n. 59, above.
189. *Theogony* 1: 147.
190. Chap. 10, n. 55.
191. *Ibid.*, nn. 112–3.
192. Vol. 1, 483, n. 113 and Vol. 2, 629, n. 20. See also Chap. 16, n. 123, above.
193. Chap. 10, nn. 163–6 and Chap. 12, n. 18.
194. See Vol. 2, 171–8.

195. Vol. 2, 179–82.
196. Baines (1996, 45).
197. Bernal (2001, 42).
198. Vol. 2, 102–3.
199. Pausanias 8: 25, 11, and Farnell (1895–1909, 4: 107). See also Vol. 2, 102–3 and Chap. 20, nn. 93–4, below.
200. Vol. 2, 94–5.
201. Astour (1967a, 225–39).
202. N. 126, above.
203. Chap. 10, 49–53, 70–72.
204. See Fontenrose ([1959] 1980, 238).
205. Vol. 2, 79–81.
206. N. 105, above.
207. Chap. 11, nn. 49, 58.
208. Vol. 2, 106–22.
209. Chap. 9, nn. 31–6.
210. Vol. 1, 96.
211. Chap. 12, n. 23.
212. Ranke (1935, 402–3).
213. Vol. 2, 169–75.
214. Chap. 5, n. 126.
215. Chap. 22, nn. 179–93.
216. Chap. 18, nn. 152–5.
217. Chap. 14, nn. 34–5.
218. See Gauthier (1925–31, 3: 103).
219. A possible derivation of *pylē* “gateway” and Pylos from the Egyptian Pr or Pr ʿ3 in the sense of “palace” was discussed in Chap. 9, nn. 135–6.
220. N. 48 above.

Chapter 20

GEOGRAPHICAL FEATURES AND PLACE-NAMES

1. Loewe’s work ([1936] 1980) is limited as it only lists toponyms containing divine names.
2. Fick (1905, 83, 105).
3. Vol. 1, 48–9.
4. Jasanoff and Nussbaum (1996, 190).
5. See Gauthier (1928–31, 3: 102–3).
6. Bochart (1646, 1: 14, 461).
7. *Argonautica*, 4: 1712–8. The translation is by R. C. Seaton, found in the Loeb series.
8. *Argonautica* 4: 1694–8.
9. Herodotos 4: 147.
10. Astour (1967a, 114–6).
11. Vol. 1, 92–3.

12. Stephanus (1825, 1: 91).
13. Chap. 22, nn. 163–6.
14. Skymnos of Chios 1: 549 and Stephanus 1: 92.
15. Strabo 14: 657.
16. Stephanus (1825, 1: 91).
17. Bérard (1927, 1: 157); Astour (1967a, 239).
18. Chap. 15, n. 159. See below for the similar case of Kythera/Skandeia.
19. Chap. 18, n. 147–55.
20. See Astour (1967a, 245–8).
21. Chap. 19, nn. 145–58.
22. See Muss-Arnolt (1892, 66).
23. For the Ithaca on the Euphrates, see Stephanus 1: 217.
24. *Iliad* 2: 631–7.
25. See Astour (1967a, 260).
26. For possible Nostratic links, see Levin (1995, 86–7). See also Lewy (1895, 244–6).
27. Gauthier (1925–31, 5: 152–3).
28. Vol. 1: 381–2.
29. Vol. 1: 501, n. 37.
30. Bérard (1927, 1: 166). See, also, Astour (1967a, 212).
31. Stephanus (1825, 1: 297–8).
32. Summarized in Astour (1967a, 114).
33. See Chap. 2, nn. 43–4. In Chap. 7, n. 66, $\sqrt{mlh}$ was also discussed in reference to “mallow.”
34. Chap. 19, n. 151.
35. Chap. 16, n. 9.
36. Stephanus (1825, 1: 367).
37. Lewy (1895, 222–3).
38. Lewy (1895, 173) and Astour (1967a, 91–2, n. 4).
39. Strabo, 8: 3,19; 10: 2,17.
40. These are discussed in Vol. 1, 483, n. 113 and Vol. 2, 629, n. 20.
41. For the connections with Samos, see Muss-Arnolt (1892, 118, n. 22). For the Phoenician *šmm* as “highplace,” see Donner and Rössler (1966, 3, nn. 14–5). It would seem likely that the Latin *summa* “topmost” derived from *šmm*. Ernout and Meillet attempt to make a genetic link between *summa* and the Irish *suim* with the same meaning. Given the large number of loan words from Latin into Irish by the eighth and ninth centuries, *suim* would seem to belong to this category. See Thurneysen (1993).
42. Stephanus (1825, 1: 374).
43. Astour (1967a, 212).
44. Bochart (1674, 1: 13.448).
45. Thucydides, 1: 8.1.
46. This etymology was proposed by Brown (2000, 65; 2001, 279).
47. Chap. 5, n. 82; Chap. 7, n. 74.
48. Stephanus (1825, 1: 89).
49. Chap. 5, n. 118. See also Chap. 1, n. 32 and Chap. 7, n. 95.

50. Stephanus (1825, 1: 91).
51. Chap. 15, n. 62.
52. Leslau (1979, 3: 217).
53. Assmann (1908, 193). See also Astour (1967a, 143).
54. Chap. 14, nn. 44–50.
55. Pausanias 9: 3: 2–9. Bérard (1927, 2: 411–4).
56. Chap. 9, nn. 175–6.
57. Chap. 22, n. 242; see Gauthier (1925–31, 1: 8).
58. Herodotos, 7: 176
59. Pausanias, 10: 22.5, trans. Levi (1971, 1: 462).
60. Gauthier (1925–31, 1: 187).
61. See Lejeune (1987, 155–6 §§154–6).
62. Palmer (1980, 12). For a discussion of the suffix -ssos, see Chap. 5, nn. 13–7.
63. Chap. 9, nn. 129–30.
64. Martin (1986, cols. 873–4).
65. Chap. 9, nn. 143–51.
66. Gardiner (1961, 422).
67. For the main discussion on the vocalization of *pr*, see Chap. 9, nn. 131–3.
68. Frazer (1898, 5: 100).
69. Pausanias 9: 12.
70. Pausanias 2: 25.10.
71. Astour (1967a, 103, n. 1).
72. Chap. 11, n. 76; Chap. 19, n. 98.
73. Chap. 21, nn. 44–6.
74. Chap. 9, 171.
75. For a discussion of the alternation *d/dr*, see Bernal (2001, 141–2). For Caland's law, see Chap. 8, n. 66 and Chap. 13, n. 55, above.
76. Pausanias 2: 36.6
77. Dhorme (1946–8, 17).
78. See Bernal (1997c, 148–52).
79. Lewy (1895, 228–9) and Chap. 8, n. 8. See also Bernal (2001, 134–5).
80. Astour (1967a); West (1997, 156).
81. Astour (1967a, 214).
82. Jasanoff and Nussbaum (1996, 9.192).
83. 2 Kings 5.10–4; Pausanias 5: 5.7–11; and Frazer (1898, 3: 478–9).
84. Chap. 10, n. 112.
85. See Stephanus (1825, 1: 25); Astour (1967a, 140–1).
86. Bérard (1927, 2: 337).
87. Fick (1905, 83, 105).
88. Vol. 2, 142–3.
89. See Frazer (1898, 3: 478).
90. Chap. 5, nn. 123–5.
91. Jasanoff and Nussbaum (1996, 193).
92. Vol. 2, 142–3.
93. Jasanoff and Nussbaum (1996, 191).
94. Vol. 2, 92–8.

95. *Iliad* 2: 869.
96. Pokorny (1959, 2: 726. 2).
97. Praetorius (1890, 26) made this plausible semantic connection *pace* Leslau (1979, 3: 386). The Chinese *cháng* “bowels” had the same implication.
98. Fick (1905, 127).
99. See the examples in Gardiner (1947, 1: 175, 2: 6, 155).
100. Chap. 9, nn. 67–75.
101. *Ibid.*, n. 28; vol. 2, 141–2.
102. *Odyssey* 10.
103. Smyth (1956, 270 §1005).
104. See Gordon (1965b, 132–8).
105. See Stephanus (1825, 57–9). He provides twelve examples.
106. Vol. 2, 81–3.
107. Vol. 1: 76.
108. Chap. 19, nn. 142–4.
109. Astour (1967a, 390). See also Bernal (1993, 249).
110. Chap. 21, n. 65.
111. Vol. 1: 119–20.
112. Stephanus (1825, 1: 206).
113. Gardiner (1947, 2: 6–7).
114. Astour (1967a, 157–8).
115. Jasanoff and Nussbaum (1996, 190).
116. *Ibid.*, 192.
117. Chap. 5, nn. 194–5 and Chap. 9, nn. 64–79.
118. Vol. 2, 506.
119. Ventris and Chadwick (1973, 416).
120. For Anthēnē near the site of Danaos’ landings in the Argolid, see Thucydides, 5: 41, and Pausanias, 2: 38. 6. For the various place names Dindymus, Dindyma, see Pauly Wissowa 5: 651–3.
121. Jasanoff made this case in discussion at Cornell University, October 1978. For this shift, see Chap. 5, nn. 197–8, above.
122. Ventris and Chadwick (1973, 77). Astour (1966, 316) and Dunkel (1981, 139) make the same point.
123. See Gordon (1965a, 32) and Moscati et al. (1969, 46).
124. Joüon (1923, 174) and Joüon and Muraoka (1991, 93–4, 203–4).
125. Herodotos 1: 171.
126. Thucydides 1: 2.
127. Pausanias 1: 39.4.
128. See the entry in Gesenius (1953).
129. Esarhaddon 3: 3, cited in Harris (1936, 144).
130. Jeremiah 48: 1 and elsewhere for the city in Moab and, for that in Naphtali, see Joshua 21: 32.
131. Gardiner (1947, 2: 25).
132. Pausanias 1: 40.5; see also Lewy (1895, 141). An old quarter in Miletos was also called Karia but this may actually refer to the native Carians who lived there-about.

133. Pausanias 8: 34.5.
134. Pausanias 3: 10.7 and Herodotos 5: 66.
135. Vitruvius 1: 1.5.
136. See Chap. 9, nn. 16–7.
137. Vol. 1: 76.
138. Stephanus (1825, 1: 273).
139. Strabo 13: 3.4; K. O. Müller (1820, 126); and Vol. 1, 76.
140. Jasanoff and Nussbaum (1996, 191).
141. Pausanias 2: 24.1.
142. Bietak (1979, 255). Bietak noted the two parallel epithets: “Beloved of Seth, lord of Avaris” and “Beloved of Seth, lord of R-3ḥt.” He also points to the Middle Kingdom place-name R-w3ty.
143. Chap. 9, nn. 172–7, 179.
144. Pausanias 2: 24.3.
145. Pausanias 6: 609.
146. *Hellenika* 3: 7.
147. Pausanias 3: 22.2. The name Gythion would seem to be connected to Gythissôn which Hesykhios defines as *dioryssôn* “trenching or canal.” This could make it a derivation from the Egyptian place-name element Gt meaning “canal or basin.” See Gauthier (1925–31, 5: 221). Such a sense would be appropriate to Gythion’s swampy situation by the sea and early attempts to irrigate it. For a picture of this delta in prehistoric and early historic times and the density of its population, see Cartledge (1979, 20).
148. Strabo 9: 440, 640. See also Fick (1905, 105).
149. Fick (1905, 105).
150. *Cambridge Ancient History* 2, pt. 2: 774–5.
151. Hope-Simpson (1965). The one exception to this generality seems to be the plain of Elis; see Hope-Simpson (1965, 7).
152. Černý (1976, 346).
153. Xenophon *Hellenica* 5: 2.7 and Diodoros 15: 5 are two examples.
154. Pausanias 8: 8.4.
155. See Chap. 21, nn. 132–4, below.
156. Pausanias 9: 8.1. Stephanus lists seven examples of this city name.
157. For a survey of later authors on this relationship, see Muss-Arnolt (1892, 73).
158. See V. Bérard (1902, 1: 193–4). Fick (1905, 75) claimed that the presence of the toponym in Anatolia meant that it was Carian. He gave no explanation of the name.
159. Harris (1939, 40–1).
160. See Albright (1950, 165–6).
161. Lloyd (1978).
162. For discussions of this, see Lloyd (1978, 617) and Griffiths (1975, 47). Sometimes the bull appears to be leaping at others. Notably at Medum, a line goes from the beast’s forefoot over his head. Griffiths interprets this as a lasso or hobble.
163. Stricker (1955) and Altenmüller (1975b). Stricker emphasizes the centrality of catharsis “purification” in these dramatic performances. He does not consider the possibility that this word, which has no Indo-European etymology might itself come from Egyptian. See Chap. 10, nn. 72–6, above.

164. Plutarch, *Lykurgos* 28: 4, tr. Perrin, *Plutarch's Lives* (1910, 1: 291).
165. Gauthier (1925–31, 3: 64). The earliest record of the name comes from a Fourth Dynasty writing from Medum itself. See Petrie (1892, pl.19).
166. Pausanias 4: 35.1, tran. Levi (1971, 2: 187).
167. Frazer (1898, 3: 453).
168. Fick (1905, 128, 131).
169. Muss-Arnolt (1892, 48).
170. Jasanoff and Nussbaum (1996, 153).
171. Chap. 9, n. 135.
172. Chap. 22, nn. 216–28.
173. Gauthier (1925–31, 5: 23) and Černý (1976, 352).

Chapter 21

SPARTA

1. Fick (1905, 113).
2. See Bomhard and Kerns (1994, 232–5, nn. 37, 39).
3. *Exodos* 1: 15. The Septuagint form is *Sēpphora*. The shift of the causative from *s-* to *hi-* in later Canaanite was discussed in Chap. 5, nn. 63–4.
4. Möller (1911, 21–212) and Hodge (1994, 528–9). See also Chap. 2, n. 21, above.
5. Such examples could also possibly indicate a vocalization of /i/ similar to the *hifil* form in Hebrew. See Chap. 5, n. 64.
6. Gauthier (1925–31, 5: 27–31).
7. Albright (1968, 235). See also Delia (1980, 118).
8. Arbeitman (1981, 967). Qiryat Sēpēr was transcribed as Καριασσοφερ in Joshua 9: 15–6 and Judges 1: 11–2.
9. See Littman (1916, 12) for a discussion of these various forms of the name. Later interpretations can be seen in Jensen (1969, 474–6).
10. Bernal (1990, 121).
11. According to the specialist in Lydian, Roberto Gusmani (1964, 202), there was a place-name in Pamphylia in southern Anatolia *ΙσFαρδίας* or *Ζβαρδιανός*.
12. Daniel and Evans (1975, 742). For the second point, see Sandars (1985, 100–1).
13. Gardiner (1947, 1: 194–9). See also Sandars (1985, 106–7).
14. Gardiner (1947, 1: 194–9) and Astour (1972a, 458–9).
15. This word is, of course, the same as Sepharad, the Medieval Hebrew name for Spain. Allegedly this naming was based on a misinterpretation of the prophesy in Obadiah 20, referring to Sardis. Roth (1970, 30).
16. Chap. 9, nn. 139–41 and Chap. 10, nn. 51–3. See also Vol. 2, 187–273.
17. For a discussion of this, see the section on *basileus* and *psilos* in Chap. 9, nn. 57–82.
18. Pallotino (1956, 230). Bonfante and Bonfante (1983, 144) define it as “people, league.”
19. See Chap. 8, nn. 46–8. The Hebrew *mas* “labor gang” is probably a later borrowing from the Egyptian *mš*, although Klein (1987) tentatively derives it from the Egyptian *ms(w)* “carriers.” Ellenbogen (1962) does not list it.
20. For the fullest studies of this, see Kees (1923) and Gardiner (1947, 2: 127–8). See, for instance, *Coffin Texts*, 227.

21. Kees (1923, 80) and Gardiner (1947, 2: 127–8).
22. Quibell (1907, 2: *Texte Religieuse*, 43), quoted in Kees (1923, 88).
23. This onomastikon is the basis of Gardiner (1947, 2: 127–8).
24. *Pyramid Texts*, Utterances 524, 1235. In this instance, it is Geb who causes the pharaoh to fly up. As he ascends, his face is that of a jackal. Kees (1923, 82–3). There is a slight difficulty here in that the /s/ in *šp³* “centipede” was originally /z/ not /s/. By the Middle Kingdom, however, the two were confused.
25. *Coffin Texts* 227, 264.
26. Budge (1904, 2: 494).
27. Kees (1923, 89).
28. Chadwick (1973, 578) hesitates on Szemerényi’s (1960a) identification of Rakedano with Lakedon and Lakedaimōn. Chantraine doubts this, while Chadwick does not discuss the relations between Anopo/Anubis—a possibility raised by Astour (1967a, 340)—and Sipatono.
29. Plutarch, *Lives*, *Lykurgos*, 18, tr. Perrin, 1: 261.
30. Pokorny (1959, 992).
31. As mentioned above, *šparagnos* was a rite of tearing apart and eating a sacrificial victim. It frequently represented Osiris’ Greek counterparts, Bakchos and Dionysos. See Astour (1967a, 178).
32. For the definition of *daimōn*, see Chap. 9, nn. 39–43. Pace Jasanoff and Nussbaum (1996, 193). See Bernal (2001, 419, n. 164).
33. Smyth (1956, 253 §897).
34. Jasanoff and Nussbaum (1996, 193).
35. Szemerényi (1960a, 15). The edition of Stephanus edited by Holsten et al. uses Aimōnia not Haimōnia (1825, 32). I am not sure which edition Szemerényi was using.
36. Szemerényi (1960a, 15).
37. Gardiner (1947, 2: 155).
38. Burkert (1985, 180).
39. Gardiner (1947, 2: 197).
40. It is tantalizing, but very unlikely, that the mythographers were aware that the name of the cult at Amyklai ultimately derived from the “Mugal the “big tree” in the Eme sal or “women’s dialect” of Sumerian. Astour (1967a, 311–2).
41. Plutarch, *De Iside* 359E. According to Plutarch (44.368E), these associations would be entirely appropriate for a steersman. Anubis, in touch with both the sky and subterranean world, represented the horizon. It is interesting, therefore, that the Syrian Stoic philosopher Poseidonios used sightings of Canopus near the horizon to estimate the size of the earth.
42. Plutarch, *De Iside* 27.361E.
43. See the long scholarly discussion in Gardiner (1947, 2: 196–8).
44. Pausanias 3: 1.2 and Apollodoros 3: 10.3.
45. T3w igrt occurs in the introductory Hymn to Osiris Wenefer in BM No. 10470, sheet c, Papyrus of Ani, quoted in Budge (1898, 13–4).
46. See the photograph in Lazos (1995, 114).
47. Tainaron, which is close to deposits of iron ore, has long been recognized as de-

- iving its name from the Canaanite *tannōr* “fire pot, furnace.” See Muss-Arnolt (1892, 46).
48. See West (1997, 471).
 49. See Apollodoros 2: 5, 12. See also Frazer’s bibliography on this (1921, 2: 234).
 50. Albright (1923). Similar games appeared in Greece after the seventh century BCE; see Vermeule (1979, 80–1).
 51. Freyer-Schauenburg (1970).
 52. Cartledge (1979, 105–7).
 53. Stephanos (1825, 261).
 54. See, also, Burkert (1985, 155–9).
 55. Chadwick (1976, 87), having read a divine name Emaa₂ in Linear B which he links to the Homeric Hermeias, dismisses the hypothesis: “because this word has originally initial w- but Hermes, Mycenaean Hermahās has not.” Burkert (1985, 156) sensibly pays no attention to this.
 56. The Bible has frequent references to a *ḥērem* being ordered by Yahweh. We know this ban was practiced by other peoples because, according to the *Mesha Inscription*, Mesha king of Moab, was ordered by his god Khemosh to do the same thing.
 57. See Exodus 12: 19.
 58. Joshua 7: 26.
 59. Müller (1841, 38), quoted in Farnell (1895–1909, 5: 7, 67).
 60. Richard Burton (1898, 2: 202–4, 376–7, 396). See also Robertson Smith (1894, 155).
 61. Numbers 14 and frequently elsewhere.
 62. For a discussion of this, see Frazer (1898, 2: 422).
 63. Strabo, 9: 2.11.
 64. See Deuteronomy 3: 8 and Joshua 12: 1.
 65. See Pausanias 2: 34.6–35. A similar glide, from Ḥermôn to Hermione, can be seen in the derivation of the city name Sikyon from Sikun; see Chap. 20, n. 171.
 66. Pausanias 2: 35.8. For *Pr mst*, see Daumer (1977, cols. 462–75). Note the /a/ in Mases, indicates a borrowing before the Canaanite shift, unlike the /o/ and /ou/ in Moses and Muses.
 67. The Egyptian *ḥzm* “to catch fish,” is clearly related even though the initial ḥ- is hard to reconcile with the Semitic *ḥrm*. See also Chap. 3, n. 72, above.
 68. The concept of political power as covering by fabric was also seen when the Sotho chief Mshweshwe asked Queen Victoria to place her blanket over his land, an act which created the later Basutoland > Lesotho.
 69. Chap. 19, nn. 48–54.
 70. See, for example, Burkert (1985, 156–9).
 71. See Chap. 19, nn. 184.
 72. *De Iside* 44, tr. Babbitt (1934–5, 107).
 73. Farnell (1895–1909, 5: 9).
 74. Herodotos 2: 52, tr. de Selincourt (1974, 150).
 75. The most plausible principal etymology for Pan is P3 im “the groan.” See Vol. 2, 171. For Bakchos and Pentheus, see Chap. 10, nn. 68–70 and Chap. 13, nn. 56–7. See also Astour (1967a, 173–9).

76. Farnell (1895–1909, 5: 4).
77. Pausanias 3: 11.11. Farnell was aware of the statue; see Farnell (1985–1909, 5: 78).
78. Imhoof-Blumer and Gardiner (1885–7, 55 and pll. 5–8). On p. 61, the authors argue that Pausanias may have been mistaken about the deity on Mount Larysion (mentioned above). They held that he may have been Hermes not Dionysos.
79. *Dionysiaka* 9: 25–30, tr. Rouse (1940, 1: 306–7).
80. Levi (1947, 1: 287); Farnell (1895–1909, 5: 59).
81. Saintyves (1936).
82. *Book of Coming Forth by Day*, Spell 168. Faulkner (1972, 167).
83. Bothmer et al. (1960, nn. 28, 38–40, 44–5, 48, 58–9, 61 and 65).
84. See, for instance, Astour (1967a, 204). See also Frazer (1921, 1: 74–5, n. 1).
85. Pendlebury (1930, 106).
86. Apollodoros, 3: 4.3. For a bibliography on this motif, see Frazer's notes in his translation (1: 320–1).
87. See the discussion in Levi's notes to Pausanias, 2: 64.
88. Pausanias, 3: 18.11–2, tr. Levi (1971, 2: 65).
89. See Müller, tr. Lewes (1830, 1: 373–5) and Cartledge (1979, 80–1).
90. This statement leaves open the question of whether or not Dorians were in Lakonia in the Late Bronze Age as Dietrich (1975, 141) maintains. Given the focus on tears in this context, the name Lames could well come from the Egyptian *rmw* “weeping.”
91. Cartledge (1979, 73).
92. Burkert (1975), Dietrich (1978), Wilets (1977, 158–63) and West (1997, 55).
93. Farnell (1895–1909, 4: 111–2, n. a).
94. Thompson (1970). For simpler and clearer views, see Fulco (1976, 52–3) and Bennet (1980, 331).
95. For a bibliography of these suggestions, see Bennet (1980, 521–2).
96. Astour (1967a, 312). For a proposal that the initial *a-* in Amyklai was the Phoenician definite article (*h*)*a-*, see Teixidor (1970, 370).
97. Frazer (1914, 135) and Dietrich (1975, 137).
98. Pausanias, 3: 19.4.
99. Dietrich (1973, 1). For the coins see Imhoof-Bloomer and Gardner (1885–8, 59, pl.16).
100. Chap. 19, nn. 78–85.
101. The lexicographers of Greek are uneasy about the etymology of *iris* linking it tentatively to a Teutonic *wir* and the English “wire”! They pay no attention to Gardiner's obvious suggestion (1957, 443) that it comes from the Egyptian *irt* “eye” which Plutarch transcribed as *iri* (*De Iside*, 10). The circle in the eye was named “iris” from this and the flower name seems to derive from that meaning. The Greek *iris* “rainbow” seems to come from iridescent circle and that gave us Iris, “messenger of the gods.”
102. Nonnos, 19: 103–5, tr. Rouse (1940, 2: 99). Staphylos, “grape,” was a biname of Dionysos himself. It is doubtful that Nonnos was aware that the Greek word—unexplained in terms of Indo-European—probably derived from the Egyptian *stp* “choose.” See Chap. 15, nn. 47–8.

103. Chap. 18, nn. 98–100.
104. Dietrich (1973).
105. It is true that Hyakinthos was supposed to have had a tomb at the Doric colony of Taranton (Polybius 8: 30.3). On the other hand, the festival of Hyakinthia and Hyakinthia the month in which it took place was known in virtually every Doric state.
106. The variant forms of Hyakinthia—Iakinthis found on Tenos (*Inscriptiones Graecae* 12: 5) and Kyakinthoi from Lyktos in Crete—do not seem to me sufficient evidence for positing another initial.
107. Chap. 10, nn. 5–46.
108. For a discussion of Káanthos and his possible relation with Kadmos, see Fontenrose (1959, 317–9). See also Chap. 10, nn. 74–9.
109. Frazer (1914, 1: 1–30). Frazer (p. 226) saw the anemone created by the blood of Adonis as coming from the Semitic Na‘aman “darling,” a common epithet for Adonis. Ajax was supposed to have died the Iris with his blood.
110. See Chadwick (1976) and Hooker (1976, 179).
111. This account would also fit the Ancient Model’s view of Mycenaean society as a foreign imposition rather than the Aryan Model’s view of it as a native growth.
112. Cartledge (1979, 53).
113. Cartledge claims (1979, 78) *pace* Chadwick that Thucydides distinguished between Dorians and “returning” Heraklids. He adds evidence from Tyrtaios to back this. Tyrtaios’ lines, however, cannot be used as a basis for a claim that the Dorians invaded or infiltrated a century later than the “return.” Thucydides (1: 12.3) specified that the Dorians came in with the Heraklids.
114. *Lycurgus* 1: 1, tran. B. Perrin (1914, 205). See also the discussion in Forrest (1968, 40–60).
115. See, for instance, Wide (1891).
116. Herodotos 1: 65, tr. de Selincourt (1974, 65).
117. See Cartledge (1979, 94). Forrest (1968, 55–8) wants to place Lykurgos in the seventh century. One of the bases for his defiance of the ancient views, which all put the Spartan lawgiver before 776, is that the reforms associated with him required writing, which he believes only developed in Greece in the eighth century.
118. Mid-twentieth-century scholarship tended to date such finds to a later time. See Boardman (1963, 7). Even Cartledge admits this (1979, 119–20). See also Forrest (1963, 31–2) and Coldstream (1977, 159–63).
119. Plutarch *Lycurgus* 4: 3–6. Scholars working in the Aryan Model cannot accept this dating because the epics were not supposed to have been written by this time. See the discussions on the dating of Homer and on the introduction of the alphabet to Greece in Vol. 1, 86–8. See also Bernal (1990).
120. *The Politics* 2: 9–12. Aristotle specified that Lykurgos had used Crete as a model for Sparta.
121. Drews (1979).
122. See Bernal (1989; 1993; 2001, 345–70).
123. Sznycer (1979), Helm (1980), Shaw (1981), Boardman (1990) and Morris (1992, 115–49). See also Katzenstein (1973, 77–219).
124. Coldstream (1977, 68–71, 99–104). He tries to avoid the consequences of his

conclusions regarding Crete by saying that similar Phoenician contacts were not important at Athens and Lefkandi, where Greek enterprise began. I find it impossible to believe that the Athenian Middle-Geometric—which began at the same time as Cretan Proto-Geometric B—was not similarly influenced by Phoenician imports from this period in both Attika and Euboea (see Coldstream [1977, 55–68]). Furthermore, we know from Homer that the main imports from the Levant in his time were “Sidonian” decorated textiles, none of which have survived. Since Coldstream wrote his speculations, Sarah Morris’s magisterial work (1992, esp. 101–49) has demonstrated substantial Phoenician influences around the Aegean in the Early Iron Age.

125. Bernal (1990, 126–8).
126. See Muss-Arnolt (1892, 89). M.L. Mayer (1960, 376–7) plausibly suggests that *kad* was borrowed twice: once in the Bronze Age as found in the Linear B *ka-ti* and the later *kēthis* and the second time as *kados*.
127. See Chap. 7, nn. 28–9.
128. Pausanias 3.15.8. Brown (1995, 142).
129. Pace Gordon (1955, 24–8), who argued that *liskâh* derived from *leskhē*. An example of *r(a)-* being heard as *li* comes from the Greek *limēn* “harbor,” which would seem to be a copied from the Egyptian **r-mni* “harbor.” See Chap. 7, n. 29 and Chap. 9, n. 175. Pace Lubetski (1979). Lubetski must be given the credit for having demonstrated a connection between *mni* and *limēn*.
130. Diodoros, 1: 98; Plutarch, 4: 5.
131. Pendlebury (1930, 45, 109).
132. See Chap. 19, n. 18. Many Dorian states also had a month, Apellaios, for assemblies and detailing of tasks.
133. Plutarch, *Lycurgus* 12: 1.
134. See Chap. 9, nn. 176–7.
135. For dissatisfaction with derivations from the place-name Helos or a supposed root **hel-* “capture,” see Chantraine and Forrest (1968) and pace Cartledge (1979, 97).
136. Plutarch *Lycurgus* 28:1 is unconvincing when he denies that Lykurgos could have had anything to do with the *Krypteia*, the secret police used to maintain the subjugation of the Helots. I see no reason to doubt the contrary claims of Plato (*Laws*, 633b) and Aristotle (*Fragments*, 538) that he did.
137. Burkert (1985, 212–3). For the cult, see Farnell (1895–1909, 3: 206). See also the excellent survey in Graves (1955, 1: 245–9).
138. Gardiner (1947, 2: 254).
139. Herodotos 6: 53–4, tr. de Selincourt (1974, 406).
140. For the pyramid, see Pendlebury (1930, 47–8), Coldstream (1977, 347–8) and Cartledge (1979, 120–1). The sixth century also saw the discovery of the supposed bones of Orestes and the worship of Agamemnon at Amyklai, see Cartledge (1979, 139).
141. The whole scheme is epitomized in the place-name Balmoral: Bal- “township” a romantic Celtic prefix and -moral, suitable for the new bourgeois age.
142. Cartledge (1979, 82) and *Iliad*, 2: 584.
143. This subject is hotly debated. Cartledge (1979, 82–3) maintains that a break occurred at the votive site, which has been excavated. The gap is, however, rela-

tively short, and, as he points out, one site does not tell us about the shrine as a whole.

144. Nonnos, 16: 102–3. See also Freyer-Schanenberg (1970).
145. For the exposure, see Plutarch *Lycurgus* 16: 1–2.
146. See Farnell (1895–1909, 3: 206). See also above in this chapter, n. 137.
147. *Lycurgus*, 27: 1.
148. *Ibid.*, 21: 1.
149. *Ibid.*, 28: 1; Pausanias 2: 16.9–11.
150. Leigh-Fermor (1958, 53, 181); Alexiou (1974, 40–8) and Du Boulay (1982).
151. For the etymology of Styx, see Chap. 20, n. 102.
152. Dennis (1848, 1: 314). See also Pallottino (1956, 149).
153. Diodoros, 1: 96.7.
154. Arbeitman (1981, 937). For a detailed discussion of the name Ḥōrōn and a bibliography on the subject, see Hvidberg-Hansen (1979, 2: 149). Ugaritic, which distinguishes between /h/ and /ḥ/, uses the latter in the name Ḥrn. Arabic has both *ḥawr* and *ḥawr* for “pit.” The former would tally better with the Greek and Etruscan initials but it is not necessary to justify the loan.
 Another link between Ḥōrōn and Charun is that the latter is depicted with a hammer [Dennis (1848, 1: 310) and Pallattino (1956, 171)]. Similarly, Ḥrn is called upon in an Ugaritic text to crush the skull of his enemy Yam. See Hvidberg-Hansen (1979, 1: 107).
155. Pendlebury (1930, 47).
156. For Menelaos in Egypt, see *Odyssey* 4: 123–40, 352–423.
157. Pausanias 2: 18, trans. Levi (1971, 2: 62).
158. See Vol. 1, 114.
159. Pausanias 2: 18, trans. Levi (1971, 2: 62).
160. 1 Macc. 12, 20–2; Josephus *Antiquities* 12: 226. See also Vol. 1, 460, n. 168.
161. Momigliano (1968, 146). Klausner has no doubts about the letter’s authenticity (1976, 195).
162. While accepting the letter’s authenticity, Elizabeth Rawson achieved the same effect as Momigliano by innuendo. Referring to the reception of the first Jewish letter quoting Areios’ earlier one, she wrote: “a friendly but possibly rather surprised reply from the Spartan authorities is later recorded” (1969, 96). The letter, in 1 Macc. 14: 21, has no noticeable trace of surprise. Peter Green (1990, 513), writes in the same vein, when describing the High Priest Jason (Joshua) as “finally dying in exile in, *of all places*, Sparta [my italics].”
163. Meyer (1921, 30). This involved translating *heurethē en graphē* as “it was found in a written work” rather than as the conventional translation “a document has come to light.” See also Astour (1967a, 98).
164. Quoted in Diodoros, 40: 3.2, trans. Walton and Green (1967, 281).
165. For the first possible etymology, see Cartledge and Spawforth (1989, 67–8) and Green (1990, 301).

Chapter 22

ATHENA AND ATHENS

1. The tradition dates back at least to Bunsen (1848–60, 5: 1: 22). It was still upheld by Robert Graves (1955, 44–5).
2. Gauthier (1925–31, 4: 100).
3. Emery (1961, 51).
4. See El Sayed (1982, 192–3).
5. Herodotos 4: 189, tr. de Selincourt (1974, 334).
6. Gardiner (1957, 542). The form with tassles is used by Erman and Grapow. It is interesting that Lesko lists one form of *ḫrw* as “tassles.”
7. Ventris and Chadwick (1973, 375, 380). The Egyptian and Cretan signs are much closer to each other than the latter is to those found at Pylos, which seems to include the helmet.
8. Gardiner (1957,  [T17]) and the sign in Ventris and Chadwick (1973, 240). The earliest chain mail was found or attested in writing in the nineteenth and eighteenth centuries BCE. See Yadin (1963, 84–5). Links of chain mail were found in Shaft Grave 5 at Mycenae. It was widespread and more common than plate armor throughout the Late Bronze Age. See Catling (1970).
9. Chap. 8, n. 65 and Chap. 10, nn. 119–20.
10. See Keimer (1931) and El Sayed (1982, 23–4). During the time in Saite, the shield lost its curves.
11. El Sayed (1982, 13), Emery (1961, 66–9), Gardiner (1961, 411–2) and Hoffman (1991, 320–4).
12. Montet (1957, 75–7) and Gauthier (1925–31, 4: 88).
13. It seems to have been distinct from the other common symbol of Neith: two bows in either a sheath or in a shuttle or maybe in both. This symbol was used in a hieroglyph of her name. It was also an important religious sign in Libya where it continues to appear on tattoos. Bates (1914, 139).
14. Newberry (1906).
15. Evans (1921–35, 2: 52).
16. For a discussion of the dating, see Lorimer (1950, 143). Lorimer believed the figure to be “female and divine.”
17. The first to make the connection appears to have been E. Gardiner (1893). For Nilsson, see his (1967, 324, 405–8).
18. Apollodoros 3: 12.3, trans. Frazer (1921, 2: 39).
19. Lorimer (1950, 446).
20. For surveys on the Palladion, see G. Lippold in Pauly-Wissowa (18: 171–201) and Frazer’s commentaries on Pausanias, 1: 28.8, in Frazer (1898, 369–70). Also, see Apollodoros 3: 12.3 Frazer (1921, 2: 38–41). Homer (*Iliad* 6: 303) visualized the statue of Athena at Troy as seated.
21. Nilsson (1967, 406). Interestingly, Nilsson links the effigy to the Gephyroi family whom Herodotos had identified as Phoenicians. The ancient historian said they had followed Kadmos to Thebes and then moved to Athens. See Herodotos, 5: 57–8.
22. Evans (1921–35, 2: 50–3). Nilsson’s firm stand against Egyptian and Semitic

- influence on Mycenaean religion, which incidentally allowed his work to be published first in Nazi Germany, would explain why in this case he, unlike Evans, was unable to put two and two together. For further discussion of his attitude, see Chap. 10, above.
23. Gauthier (1925–31, 1: 141).
 24. *Les lamentations d'Isis et de Nephthys*, quoted in Mallet (1888, 7).
 25. Herodotos 4: 180, tr. de Selincourt (1974, 331).
 26. Herodotos 4: 189.
 27. Herodotos 2: 182. This gift is confirmed by its mention in the Lindian Record inscribed in the first century BCE. See Jacoby (1923–58, 3b, n. 532). See also Lloyd (1988, 237).
 28. Herodotos 2: 175.
 29. Herodotos 2: 182. According to the historian Xenagoras, the temple in Lindos had an inscription in Egyptian hieroglyphics. See Jacoby (1923–58, 3b, 240.F16). Lloyd (1988, 237) doubts Herodotos' claims that there was no personal relationship between Amasis and Kleobolos, although he is willing to concede that there may have been earlier traditions of contact between Lindos and the Danaids from Egypt. For Kleobolos' friendship with Solon and his contact with "philosophies in Egypt," see Diogenes Laertius 1: 89–93.
 30. Herodotos 2: 182. Alan Lloyd, in his commentary on the second book of Herodotos' Histories (1988, 235) sees a contradiction between views of the French scholar, F. Chamoux who believed that the statue was Greek in style, and the observations of the Italian L. Vitali who saw it as Egyptian. There is no way of resolving this disagreement. In any event, the artistic styles would not have been so far apart in the sixth century and the theological identification of the Egyptian and Greek goddesses was complete.
 31. Herodotos 3: 47, tr. de Selincourt (1974, 223). Pliny (*Natural History*, 14: 2) described the corslet of Lindos as having 365 threads. The passage from Herodotos is also important because it contains one of the earliest references to cotton [εἰρίοισι ἀπὸ ξύλου "wool from a tree"]. For a discussion of this corslet, see Picard (1957, 363). (I am indebted to Anthony Snodgrass for this reference.) There is no reason to doubt that cotton was grown in Egypt at this period. It may, in fact, date back much further. See Chowdhury (1971).
 32. *The Suppliants* 50; see Picard (1957, 365).
 33. *Iliad* 2: 529, see the discussion in Picard (1957, 369). Also see *Iliad* 6: 286–305.
 34. See El Sayed (1982, 1: 17–8).
 35. The Egyptian sources were collected by Mallet (1888, 9–10). Mallet also quoted Eustathios a twelfth-century CE bishop of Thessalonica. See also El Sayed (1982, 76–80).
 36. Mallet (1888, 1: 9, n. 2). See also Parke (1977, 38).
 37. *Euthypro*, 6a. This is cited in Davison (1958, 24). For Asterios being known as the Minotaur, see Apollodoros 3: i.4, and Pausanias 2: 31.1.
 38. For the quotation and an extensive bibliography on these representations found on Crete, Thera, Melos and Kea, see Morgan (1990, 260–1).
 39. *Iliad* 6: 285–305.
 40. Hampe and Simon (1981, 278).

41. See Davison (1958, 28–9) and Parke (1977, 34–5). See also Jeffery (1976, 97–8).
42. Charles Seltman describes the obverse of this coin (1933, 49, pl.3.16) as “Rude head of Athena to r., the eye full and globular, lips thick, ears large with earring.”
43. The figure can be seen embossed on the cover of the luxury edition of *Black Athena*, Vol. 1.
44. Herodotos 1: 60, tr. de Selincourt (1974, 63).
45. Bates (1914, 203–7).
46. *Iliad* 6: 301. See also the note to Herodotos 4: 189 in Godley’s Loeb translation (2: 393). Although *ololugē* is clearly onomatopoeic, it is interesting to note the Canaanite root $\sqrt{hl}$ “praise, shout for joy.”
47. Herodotos 4: 147–66.
48. For a discussion of the literature on this issue, see Davison (1958, 38, n. 25).
49. Plutarch, *De Iside*, 9: 354.c.
50. Proklos, *In Timaeum* 1: 30. A head from the seventh century BCE found near the temple of Athena at Mycenae had a veil. See Hampe and Simon (1981, 278, fig. 439).
51. “Louvre Funerary Papyrus” 3148 quoted in Pierret (1873, 1: 43–7) and cited in Mallet (1888, 191). Budge followed Mallet on this interpretation (1904, 1: 459–60).
52. For a discussion of *ʿqri*, see Gardiner (1947, 1: 5).
53. Aiskhylos, *Khoephoroi*, 592.
54. There is even the Egyptian expression *gh n mw* “cloud burst.”
55. See the commentary of Anne Burton (1972, 69–70).
56. Porphyry “On the Cave of the Nymphs” 14.
57. See Griffiths (1975, 32–3) and Witt (1975, 272).
58. Pausanias 1: 29.1, tr. Frazer (1898, 2: 373–4); see also Parke (1977, 39–40).
59. See, for instance, the “Stela of Ikhnofret,” Berlin Museum 1204, tr. in Lichtheim (1973, 123–5).
60. Van Windekens’ proposal (1986) that *peplos* derives from a reduplication of the root **pel* “fill” provides no advantage.
61. *Iliad* 2: 550–1. For a discussion of this, see Davison (1958, 25).
62. See Lorimer (1950, 442–9).
63. See Herington (1955, 543–6, 17, 32–5).
64. *Timaeus*, 22C–23D.
65. Plutarch, *Theseus* 24.3, and Pausanias 8: 2.1, and the scholiast on Plato *Parmenides*, 127a. These are summarized in Davison (1958, 24).
66. Diodoros 4: 60.2 and Apollodoros 2: 1.4. See also Cook (1914, 1: 543–6).
67. De Santillana (1969, 826).
68. Herodotos 2: 161; Parke (1977, 33–4) and Davison (1958, 25–6). Davison points out that Hera was dressed quadrennially at Olympia. There is no reason to suppose that this celebration was any older than the Attic festival.
69. Herodotos 2: 62, tr. de Selincourt (1974, 153).
70. The *Great Text* at Edfu indicates that Neit’s major festivals were on the first days of the third and fourth months of Prt (the winter and growing season). Mallet (1888, 95) argued that festivals at Esna should not be used as a basis for those at Sais.

- Allan Lloyd disagrees (1976, 280–2) and says that “the myths and rituals at Esna were closely modelled on those at Sais” and that, therefore, they could be used for assessing the ritual calendar in the Lower Egyptian city. El Sayed too (1982, 1: 45) believes that one can and should use the abundant records at Esna to reconstruct rituals for which no evidence can be found at Sais.
71. Lloyd (1976, 281) and Gardiner (1957, 489).
 72. This would explain why Herodotos stated that the festival was called *Lykhnokaîē* “lighting of lamps.” Lloyd (1976, 282) writes condescendingly, “It simply did not occur to him that the Egs. may have had their own name.”
 73. Lloyd (1976, 280).
 74. Parke (1977, 45–6) and Farnell (1895–1909, 1: 276).
 75. Farnell (1895–1909, 1: 276–8).
 76. Parke (1977, 36).
 77. See n. 37 above and Pindar *Odes* 13: 40. In these various fiery contexts Athena was known as Hellōtis. Farnell (1895–1909, 1: 278) is willing to accept the hypothesis of the twelfth-century author of the *Etymologicum Magnum* that Hellōtis derives from a Semitic Elloti “goddess.” Astour (1967a, 139), however, derived this name from the Semitic *hll*. He cites the Akkadian form Elletu. Yet another possibility is that an early loan from the Egyptian *sr̥f* and Semitic *sr̥p* contaminated the name. The Semitic word means “flame, heat, light” and is found with the specific sense of “torch” in the Demotic *sr̥f*. This would seem to have been borrowed later as the Greek is σέλας, descriptive of the brilliance of fires, and torches.
 78. See Astour (1967a, 135, 269–70). The complex relationship between the PIE *Hast^her- “star” and the Semitic *ṭtar is discussed in Chap. 4, nn. 111–3.
 79. *Iliad* 5: 741. For the Bronze Age connections, see below.
 80. For denials of Athena’s relationship to the Gorgon, see Farnell (1895–1909, 1: 286–8).
 81. Apollodoros, 3: 12.3. For a discussion of these ambiguities, see Fontenrose (1959, 244–5).
 82. Warren (1980–1, 86).
 83. Lambrou-Phillipson (1990, 211, n. 68).
 84. See Cline (1994, 147, n. 126).
 85. Warren (1980–1, 82–5; 1981, 155–67).
 86. Mayer (1887, 190). See Farnell (1895–1909, 1: 287).
 87. For ‘Anat’s behavior with the heads of her victims, see below.
 88. Pausanias, 8: 47.5, trans. Frazer (1898, 4: 433).
 89. Linear B texts do not contradict the strong traditions that human sacrifice to various deities was common in Minoan Crete and Mycenaean Greece. Chadwick (1976, 92).
 90. Scholiast on Lycophron 1141, quoted in Farnell (1895–1909, 1: 383).
 91. Scholiast on Pindar Olympian Odes 13.56, quoted in Farnell (1895–1909, 1: 388).
 92. Porphyry, *De Abstentia* z.54–6 in Eusebius 4: 16. For the belief that these practices derived from Mycenaean culture, see Hill (1940, 64–6) and Bennet (1980, 376–7, 535).
 93. Hvidberg-Hansen (1979, 2: 101).

94. Pettinato (1981, 245–9).
95. Hvidberg-Hansen (1979, 1: 102–3).
96. Gardiner (1957, 209).
97. For a discussion of the prefixed *t*-, see Hvidberg-Hansen (1979, 1: 139–40).
98. Hvidberg-Hansen (1979, 1: 140).
99. Gordon (1965a, 458).
100. For a discussion of this name, see Hvidberg-Hansen (1979, 1: 84, 2: 109–10). A. Vincent (1937, 27–31) argued that ʾnt Ḥr should be translated “Terror of ʾAnat.”
101. Helck (1962, 462).
102. Hvidberg-Hansen (1979, 1: 96).
103. Gaster (1961, 318, 329, 353–4). See also Hvidberg-Hansen (1979, 1: 89–95).
104. Hvidberg-Hansen (1979, 1: 89–95). There is some doubt as to whether the *šparagmos* ever took place or even whether it is physically possible.
105. For a description of a Greco-Phoenician inscription from Athens, see Hvidberg-Hansen (1979, 1: 13–4). To add to the confusion it should be noted that Tanit was frequently identified with Juno.
106. Philo in Baumgarten (1981, 17–8, 221).
107. Farnell (1895–1909, 1: 277–9). For a discussion of the controversy on this, see Baumgarten (1981, 221).
108. See Hvidberg-Hansen (1979, 1: 101, 2: 108–9) and Bennet (1980, 139, 141, 231, 374, 534).
109. Fontenrose (1959, 274–306, esp. 300–1). There are, in fact, other parallels between Perseus and Apollo to which Fontenrose does not draw attention: both are sons of Zeus, hidden by being set adrift with a female twin. The confusion of generations in the Perseus myth makes Danae seem much more like a sister than a mother. All in all, Perseus “the destroyer” would seem to be an aspect of Apollo, very much like Resheph in the Canaanite pantheon. For further discussion of Apollo and Artemis, see above Chap. 19.
110. See n. 57 above.
111. “The Shield” lines 225–6. Frazer’s translation is in a quotation from Apollodoros 2: 4.2. Interestingly, *κάρη* “head” could be either singular or plural in epic Greek. The verse goes on to describe what is translated as “bright tassles of gold (that) hung down”—*θύσανοι* “tassles.” For the etymology of the word from the Egyptian *ṯs* “knot,” see Chap. 18, nn. 39–40. These tassles are restricted in the *Iliad* to those of Athena’s *aegis*, which, according to Herodotos (4: 189), was a flayed goat skin. (See above).
112. ʾnt 2: 8–13, trans. Israel Abrahams from Cassuto (1971, 87). In Hebrew *yad* “hand” often also stands for “penis.”
113. For a discussion of this literature, see Green (1975, 337–8).
114. Ugaritic text 49: 26–36, trans. Gordon (1965b, 202–3).
115. Isaiah 14: 12–4. See Albright (1968, 201–2).
116. For the Semitic etymology of Satan, see Chap. 18, n. 63.
117. *Book of Enoch*, esp. Chaps. 86–7. Charles (1912, 187–9).
118. Albright (1929). For Hathor, see Budge (1904 1: 428–38).
119. Gilgamesh 6. Gardner and Maier (1985, 148–65). For a survey of different translations, see Fontenrose (1959, 167).

120. For these parallels and a discussion of their relation to the myths surrounding Europa as the Evening Star mated by a bull, see Astour (1967a, 135). For Attar, see Caquot (1958, 45–60). For the Gorgon's beauty, see Pindar, *Pythian Odes* 12: 15 and Pausanias 2: 21.6.
121. For a discussion on the Pseudo-Nilus passage, see Astour (1967a, 180).
122. *Iliad* 18: 590; Plutarch, *Theseus* 17–9; Diodoros Sikeliotes 6: 61.
123. Quoted in Ugaritic and English in Astour (1967a, 180).
124. Diodoros 20: 14; Aubet (1993, 212–5).
125. Aubet (1993, 207–16).
126. Philo of Byblos, Jacoby (1923–69, 814), trans. Baumgarten (1981, 244).
127. Macalister (1912, 2: 402–3). For a discussion of the literature on this discovery, see Green (1975, 330–4).
128. The earliest survey of this tradition after Eusebius, *Preparation for the Gospel* (bk.I.) in the fourth century CE was carried out by William Whiston in 1737. For a study of Canaanite child sacrifice as it related to Judaism, see Spiegel (1967). See also Albright (1968, 204–12) and Green (1975, 149–87, 327–35).
129. For a discussion of this parallel, see Astour (1967a, 204–7).
130. Albright (1968, 204–7).
131. Warren (1980–1, 86).
132. Porphyry, *De Abstentia* 2: 56.
133. Dussaud (1921, 163–73).
134. Hvidberg-Hansen (1979, 1: 81–105). Alberto Green concluded his study of human sacrifice in the ancient Near East by urging that the extent of human sacrifice to 'Anat and associated goddesses should be studied (1975, 202–3).
135. Green (1975, 109–48).
136. Herodotos, 2: 63, 170.
137. Gardiner (1961, 354–5).
138. Green (1975, 320–1).
139. Herodotos 2: 100, tr. de Selincourt (1974, 166).
140. Herodotos 1: 185. See also Lloyd (1988, 15).
141. See n. 108 above.
142. Katzenstein (1973, 187–8); Harden (1962, 67–8).
143. Virgil, *Aeneid* 4, 590–670; Silius Italicus, *Punica*, 7: 70–180.
144. Jacoby (1923–69, Frag. 82, 3b: 566). See Truesdells Brown (1958, 35).
145. Justin 18: 6.
146. Ibid.
147. Silius Italicus 1: 81–7 and Justin 18: 6. For an equation between the temple of Juno described by Virgil (*Aeneid* 1: 441–7) and that of Elissa in Silius (1: 81–7), see Bunnens (1979, 212).
148. Movers (1841, 1: 607–13); Gibert Picard (1948, 256–7).
149. Harden (1962, 80). The sign may, however, also be connected to the *aserôt*, wooden pillars with gruesome hangings dedicated to a goddess found in the temple of Yahveh in Jerusalem. For a succinct survey of their nature, see De Vaux (1965, 2: 285–7).
150. Warren (1980–1, 84–6).
151. Evans (1921–35, 1: 220–4, 248–56).

152. 2 Kings 23: 7.
153. The character of the Ugaritic >Aṭirat was much less clearly defined than those of ʾAnat and ʾAttarte. See Hvidberg-Hansen (1979, 1: 71–80). See also Zeʾev Meshel (1979).
154. For ʾAnat at Bethel, the Aramaic texts at Elephantine and Jeremiah's denunciation, see Grelot (1972, 39–40, 346–8, 350–2). See also Kraeling (1953, 87–90) and Porten (1969, 120).
155. Warren (1980–1, 84). For this class of scarab, see Stock (1955, 23–4).
156. Plato, *Timaeus* 21E, tr. Bury (1929, 31).
157. Plutarch, *De Iside* 354C.
158. Kharax of Pergamon, scholiast on Aristides, cited by Mallet (1888, 243).
159. Mallet (1888, 245) and El Sayed (1982, 1: 101–6).
160. Pausanias 12: 1, trans. Frazer (1898, 1: 459). For a discussion of this cult and the alternate names Onka and Onga, see Vol. 2: 100–5.
161. See Vol. 1: 111–2. For Champollion's conviction that Sais was “the mother of Athens,” see his journal for 9/14/1828, published in Hartleben (1909, 2: 64).
162. Witt (1975, 96).
163. Diodoros 1: 28.4, tr. Oldfather (1933, 1: 91).
164. Burton (1972, 122). The toponym appears in Gauthier (1925–31, 1: 106), not p. 104 as she indicates.
165. For these place-names, see Gauthier (1925–31, 5: 68–90). Burton is quite right in maintaining that the final -t had disappeared by classical times. The Demotic form was *s* and the Coptic *se* or *si*. She does not consider the possibilities (1) of archaism and (2) that the Egyptian name could have been introduced to Greece in the Bronze Age.
166. Chantraine considers the possibility that the word derives from a root found in the Sanskrit *vāstu* but sees difficulties with the vocalizations. Others have suggested a “pre-Hellenic” origin.
167. Diodoros 1: 28.4–5, tr. Oldfather (1933, 1: 91–3).
168. Burton (1972, 122); Aristotle, *Athenaion Politeia* 12: 2; and Plutarch *Theseus*, 25. Burton correctly points out (213) that the Egyptian caste system was not rigid and seems to have consisted of more than three categories. Nevertheless, conservative Greeks of the classical period were impressed by what appears to have been a true hereditary division of labor. There is no reason why they should have taken on, let alone preserved, all the subtleties of the Egyptian system.
169. See Chap. 5, n. 126.
170. Burton cites Ranke (1935, 1: 121).
171. The scholiast of Aristides, 13: 95. S.
172. Diodoros 1: 29.1–4.
173. Burton (1972, 125); Apollodoros 3: 14.7.
174. Tzetzes, *Ad Lycophronem* 3 in Müller (1841–70, 3: 639). Burton (1972, 124). In Hellenistic times, the Egyptian identification of Sais with Athens and Nēith with Athena can be seen in coins struck at Sais. They have a portrait of Athena with an owl in one hand and a spear in the other. See Frazer (1898, 5: 49).
175. Burton (1972, 125).
176. Bernal (2001, 388–9).

177. Diodoros 1: 29.4. Apollodoros 3: 15.4 refers to legendary connections between Eumolpos, the eponym of the Eumolpids, and Ethiopia “if not Egypt.” Burton (1972, 126).
178. Anne Burton maintains (1972, 11) that the story of a Saitian colony at Athens may have begun with Plato or Theopompos in the fourth century BCE. Christian Froidefond, however, argues (1971, 276) that the stories were current at the time of Herodotos. Given the cultic parallels referred to above, I see no reason to doubt Plato’s report (*Timaeus* 21E) that the Saitians welcomed Solon as an Athenian kinsman early in the sixth century.
179. Pausanias 1: 2.6.
180. Apollodoros 3: 14.1. See also Chap. 19, n. 216, above. For a survey of the literature concerning Kekrops, see the note in Frazer (1921, 2: 77).
181. Apollodoros 3: 14.1, and Pausanias 1: 2.6.
182. See Burton (1972, 122–3).
183. Herodotos 8: 47.
184. Apollodoros 3: 14.1.
185. Epitomized in Justin 2: 6.
186. Pausanias 1: 2.6.
187. Pausanias 8: 2.2.
188. All in Jacoby’s edition (1904) of *Marmor Parium*. For Kekrops, line 1, Jacoby (1904, 136–9). Jacoby gives other ancient dates for the beginning of Kekrops’ reign; they vary from 2164 to 1556. Kadmos is put at 1518 and Danaos at 1510 BCE.
189. Hekataios, frag. 119J.
190. Kretschmer (1913, 309).
191. For the various versions of Manetho’s text, see Waddell (1940, 66–73).
192. Vol. 2: 187–273.
193. Diodoros 5: 79, tr. Oldfather (1939, 1: 313).
194. Vol. 2: 178–83.
195. Lambrou-Phillipson (1990, 55); Warren (1995, 3).
196. Evans (1921–35, 1: 287). See also Meyer (1928–36, 1: 263) and Uphill (1984), whose views are now backed by Peter Warren (1995, 3).
197. Kemp and Merrillees (1980, 15).
198. Warren (1995, 3).
199. Evans (1921–35, 2: pt. 1, 192–208) and Helck (1979, 45–9); Hooker (1976, 34) and Warren (1995, 2–3).
200. Crowley (1989, 58–63, 71–83, 95–8, 298). For the developments of Thoueris in the Aegean, see Weingarten (1990). Warren also discusses these influences (1995, 2). See Chap. 11, nn. 35–8.
201. Vol. 2: 224–6.
202. Warren (1995, 3). See also Warren and Hankey (1989, 131–4).
203. See Vol. 2: 257–69.
204. Caskey (1973, 123).
205. Stos-Gale (1984) and Stos-Gale, Gale and Houghton (1995, 127).
206. See Vickers (1990).
207. See the references to Pētēs and Erekhtheus in Diodoros 1: 28–9 and in *Marmor Parium*, ed. Jacoby (1904).

208. The name could derive from **inb* qd “wall builder.” This is not attested, although qd *inb* with the same sense is. Although *amphi* as “both” has a strong Indo-European etymology, it would parallel the Canaanite suffix *âyim* > *ai*; see Chap. 20, n. 104. In the sense of “around,” *amphi* in city names could well come from *inb* “city wall.” Qd “to build, construct” may be the origin of the Greek *ktizô* “to found cities.”
209. Diodoros 1: 29. The name Erekhtheus could be an Aegypto-Greek combination of *i3h* “radiant spirit” and *theus* or (i)3hty(w) “horizon-dwelling gods of remote people.”
210. Chap. 19, nn. 66, 164–5.
211. Gell (1810, 121).
212. Frazer (1898, 3: 274). I have not been able to find any later references to these columns.
213. Badawy (1966, 133–4, 149). See also Perrot and Chipiez (1883, 1: 250, fig. 166).
214. Hartleben (1983, 426). See also Badawy (1966, 149) and Perrot and Chipiez (1883, 1: 251, fig. 167).
215. The Aeolic and Ionic columns seem to have been more influenced by Phoenician forms during the Archaic period. See Betancourt (1977).
216. I never give liquid value to the -3 in the articles *p3*, *t3*, and *n3* because these forms only became widespread in the middle of the Second Millennium after /3/ had lost it. This is not the case with the ancient word *t3* “land.”
- Athenians may have recognized a special relationship with Troizen. During the Persian War, when they abandoned their city, they sent their women and children to Troizen. For the decree concerning this and Greek sources about it, see Jameson (1960).
217. Pausanias 2: 30.6.
218. Pausanias 2: 33.2. Walter Burkert has described the significance of Poseidon at Delphi (1985, 221).
219. Pausanias 2: 30.6.
220. Vol. 2: 88–92.
221. See nn. 246–56 below.
222. Farnell (1895–1909, 4: 9–10).
223. Pausanias 2: 306–7. Frazer (1898, 3: 272). Seltman (1933, 111, 266, pl. 64.4) considered this profile of Athena to be “one of the finest portraits on Greek or any coinage.”
224. Farnell (1895–1909, 4: 10). See also Marinatos (1974, 316).
225. Pendelbury (1930, 67, n. 151); Helck (1979, 95, 284, n. 126). Lambrou-Phillipson (1990, 337, n. 422). Pendelbury saw the scarab as coming from the Second Intermediate period; Helck and Lambrou-Phillipson saw it as Eighteenth Dynasty.
226. Vol. 2: 88–92.
227. See n. 55 above.
228. Pausanias 2: 33.1.
229. Diodoros 5: 57–8. Another parallel between Rhodes and the Argolid comes from the place-name Sarôn near Troizen and the Saronic Gulf and the modern Soroni

- on the richest plain in Rhodes. For a derivation from the Canaanite, the place-name Sarōn is already found in the fourteenth century *Amarna Letters*. The name is generally accepted as meaning “fertile coastal plane.” See Astour (1967a, 92).
230. Pausanias 2: 38.4, tr. Frazer (1898, 1: 130–1).
231. Pausanias 2: 37.1, 2: 36.8.
232. Leake (1830, 2: 472) quoted in Frazer (1898, 3: 300).
233. Frazer (1898, 5: 49).
234. Hayes (1973, 56).
235. Manetho, frg. 43 in Waddell (1940, 91).
236. Mallet (1888, 120–1).
237. Josephus, *Contra Apionem* 1: 14 and Hayes (1973, 59). For a discussion of the list of priests, see Vol. 2: 335–6.
238. Gardiner (1961, 160); von Beckerath (1965, 133–4).
239. Josephus, *Contra Apionem* 1: 14. For se-n-ha’pi, see Griffiths (1970, 395–6). For Reports on Serapis, see Tacitus, *Historiae* 4: 83–8.
240. Plato, *Kritias* 112 A.
241. See Gauthier (1925–31, 1: 8). For a possible link between Lykabētōs and the contested term *lukabas*, see Chap. 19, n. 37.
242. See Chap. 9, nn. 92–3, above.
243. Diogenes Laertius 3: 7, tr. Hicks (1980).
244. See Pausanias 1: 29.2, and Frazer (1898, 2: 378–9). Also see Levi (1971, 83, n. 172).
245. See Chap. 12, nn. 36–9.
246. See Newberry’s talk reported in Gardiner (1947, 1: 117) and A. Evans (1921–35, 2: 1, 51–4).
247. A. Evans (1921–35, 2: 1, 51–4).
248. For the influential work on “white” Libyans, see Bates (1914). See Gardiner (1947, 1: 116–9).
249. Gardiner (1947, 1: 116–9).
250. See Vandersleyen (1995).
251. Gardiner (1947, 1: 118). See, also, El Sayed (1982, 261–2, doc. 182; “Inscription in the solar temple of the Fifth Dynasty pharaoh Niuserre”).
252. Gauthier (1925–31, 2: 139).
253. Egberts (1997, 160).
254. Erman and Grapow (1926–53, 5: 393, 25).
255. Gauthier (1925–31, 2: 50–1).
256. Erman and Grapow (1926–53, 5: 391). This meaning indicates that at least the Egyptians saw the sky as blue, *pace* J.P. Brown (1968b, 37–8).
257. Jasanoff and Nussbaum (1996, 185).
258. Nn. 80–1.
259. See Faulkner (1969, 99).
260. El Sayed (1982, 262).
261. Plato, *Hippias Major* 290C; Cicero, *De natura deorum* 1: 30.23, tr. Douglas (1985).
262. Diodoros 1: 12.8, tr. Oldfather (1968, 45).
263. Davies and Gardiner (1936, ill.XX).

264. For the uncanniness of blue eyes, see Chantraine (1966, 195–6) and Maxwell-Stewart (1981). For opposition to the notion, see Watson-Williams (1954). I am indebted to R. Drew Griffith for these references.
265. For her veiling, which seems to have indicated both her virginity and the upper blue sky, see Plutarch, *De Iside*, 354.C; Proclus *In Platonis Timaeum Commentarii*, 30. For the Egyptian background to their reports, see Hani (1976, 244). See also Assmann (1997, 119) for the possibility that the concept of veiling may have derived from a mistranslation of the term *wḥ ḥr*.
266. Pausanias 1: 14.6.
267. Kharax in Tzetses *Ad Lycophronem* III in Müller (1841–70, 3: 639). In Hellenistic times, the Egyptian identification of Sais with Athens and Nēith with Athena can be seen in the coins struck at Sais with a portrait of Athena an owl in one hand and a spear in the other. See Frazer (1898, 5: 49).
268. Mallet (1888, 83–4) and Gauthier (1925–31, 4: 88).
269. See, for instance, the identifications of W3dyt with Pr W3dyt and B3stt with Pr B3stt, in Chap. 9, nn. 143–62.
270. Egberts (1997, 158).
271. Gardiner (1945, 110). Vycichl (1983, 18) misdates the Gardiner article as 1944.
272. Interestingly, Egberts had himself “smuggled” in a /t/ in Ḥt-(t) rpyt.
273. Egberts (1997, 154–9). Jasanoff and Nussbaum made similar criticisms in less detail in (1996, 194).
274. Chap. 10, nn. 5–85.
275. See Thucydides 5: 41, and Pausanias 2: 38.6.
276. Egberts does not consider this issue.
277. See Vycichl (1983, 18).
278. Genesis 44: 50. See Vergote (1959, 148).
279. Plato *Timaeus*, 21E.
280. See Vol. 2: 81–90.
281. Plato *Timaeus*, 21E, trans. Bury (1929, 31).

CONCLUSION

1. Darwin (1889, 2: 295–6) quoted in Kuhn (1970, 151).

GLOSSARY

Africa Africa fits the conventional definition of a continent as a large land mass surrounded by water. Like the concept of “continent” itself the definition of Africa is problematic. It contains a range of climates, from desert to rainforest and is divided by many natural boundaries, though these have shifted over the millennia, making contacts among the various climatic regions over time more possible than they are today. As the continent in which modern humans have lived longest, it has a wider genetic variation than all the rest of the world put together. There is, however, a surprising degree of linguistic uniformity. Thus, all in all, Africa remains too useful a concept to be deconstructed.

Afroasiatic Otherwise known as Afrasian and formerly called Hamito-Semitic, this linguistic super-family consists of a number of language families including Beja, Berber, Chadic, Egyptian, Semitic, Omotic and Central, Eastern and Southern Cushitic.

Ainu People surviving in northern Japan. Their language is thought to be an independent branch of Euroasiatic.

Akkadian The Semitic language of Mesopotamia heavily influenced by Sumerian. It was replaced by Aramaic around the middle of the First Millennium BCE.

Alphabet A particular form of script in which signs uniquely represent single phonemes. Nearly all known alphabets derive from a single form developed in Egypt or the Levant, in the Third Millennium BCE. The only exceptions to this pattern are a very few created by analogy to those descended from the original alphabet. The outstanding examples of the latter type are the Irish Ogham and the Korean alphabets.

Altaic Widespread language family in Central Asia, including Turkic, Mongol and possibly Tungus and Korean. It is thought to be an independent branch of Euroasiatic.

Amharic This Ethiopian Semitic language is the national language of Ethiopia.

Anatolia Ancient region more or less co-extensive with modern Turkey.

Anatolian Extinct Indo-Hittite but non-Indo-European languages of Anatolia. They include Hittite, Palaic, Luvian, Lycian, Lydian and probably Carian and Etruscan.

Aramaic A West Semitic language. Originally spoken in parts of what is now Syria, it became the official language of the Assyrian, Neo-Babylonian and Persian empires. It replaced the Canaanite dialects of Phoenician and Hebrew in the East Mediterranean around the middle of the First Millennium BCE. In its turn it was replaced by Greek and Arabic.

Archaic Greece Greek historical period conventionally dated from the first Olympic Games in 776 BCE to the beginning of the Classical Age around 500 BCE.

Armenian Indo-European language of an ancient people in eastern Anatolia. It is sometimes supposed to be especially close to Greek. As the earliest Armenian texts only go back to the fourth century CE, the similarities may only be due to Greek influence or common contacts with Semitic languages.

Aryan Term derived through the Semitic *ʿary* from the Egyptian *iri*, “companion.” The people later called Persians described themselves as

Arya. Nineteenth- and twentieth-century scholars used the term to denote speakers of an Indo-Aryan or Indo-Iranian branch of the Indo-European language family. These people appear to have invaded Iran and India from the northwest in the first half of the Second Millennium BCE. In the late nineteenth century CE the term came to be used for the “Indo-European” or “white race” specifically excluding Jews.

Asia A name derived from the western Anatolian state of Assuwa in the Second Millennium BCE. Among the Greeks, the term was used both for Anatolia (Asia Minor) and for the whole continent across the sea, to the east of Greece. Strictly speaking, neither Asia nor Europe count as continents as they are not surrounded by water. Furthermore, Asia is divided by permanent geographical barriers and is populated by peoples with very distinct languages and cultures.

Assyria An ancient city-state or kingdom in northern Mesopotamia. It dates back to the Third Millennium BCE. Its periods of greatest power were at the end of the Second Millennium and between 900 and 600 BCE. Its language was an archaic dialect of Akkadian.

Atlantic languages Branch of Niger-Congo spoken along the west coast of Africa. One branch, Fulani, is spoken in pockets as far east as Cameroon.

Autochthonous Native or aboriginal.

Bantu By far the largest branch of the Niger-Congo language family. It is spoken from Cameroon in the west to Kenya in the east and South Africa in the south. It appears to have expanded in the last 3,000 years.

BCE Before the Common Era. “Common” refers to the use of the Gregorian calendar, the most “common” calendar in the modern world.

Beja Branch of Afroasiatic spoken for at least the past 5,000 years in eastern Egypt and the Red Sea coast of the Sudan.

Berber The Afroasiatic language family once spoken throughout north-west Africa. It is still spoken in pockets from the Western Desert of Egypt to Morocco and Mauritania.

Besserwisserei The German for “knowing better” refers to a scholarly approach based on the belief that the alleged “science” and “scholarly method” of nineteenth- and twentieth-century historians made their conclusions categorically superior to those of ancient writers.

Book of Coming Forth by Day Better known as *The Book of the Dead*, this compilation of spells and instructions guides the soul of the deceased through the journey of the afterlife.

Bronze Age Modern term for the period when bronze, a copper alloy usually with tin, was used for tools and weapons. Iron largely replaced bronze. In southwest Asia and around the eastern Mediterranean the period lasted from approximately 3500–1100 BCE. In east Asia and western Europe it started and ended later. Most of Africa went straight from a stone age to an iron age.

Byblos Ancient port city in what is now southern Lebanon. In close touch with Egypt, it was the most important Levantine city until eclipsed by Sidon at the end of the Second Millennium BCE.

Calque A literal translation of a word, expression or idiom from another language. “Snow peas” from the Chinese *xuedou* “snow peas” is an example. “Toufu” from the Chinese *doufu* or the Japanese *toufu* is not a calque but a loan.

Canaanite A Semitic language influenced by Ancient Egyptian. It was spoken in the southern Levant between 2000 and 500 BCE, when it was displaced by Aramaic. Phoenician and Hebrew are the best known later Canaanite dialects. “Canaanite” is also used by archaeologists to describe the material culture of southern Syro-Palestine, *circa* 1500–1100 BCE.

Carian Language spoken in southwest Anatolia. It was probably Anatolian but it may have been non-Indo-Hittite. Alphabetic inscriptions date from the sixth century BCE.

CE Common Era. This term is used by non-Christians in general and Jews in particular to avoid the sectarianism of AD, *Anno Domini* “in the year of our Lord.”

Central Cushitic A branch of Afroasiatic. It is spoken in pockets of northern Ethiopia.

Central Khoisan A cluster of Khoisan languages spoken in Namibia and Botswana with the feature of binary gender found also in Hadza.

Ceramic period A duration of time reconstructed by archaeologists on the basis of potter styles.

Chadic Branch of Afroasiatic with many languages stretching from the Central African Republic and Cameroon to northern Nigeria.

Classical Greece Greece in the fifth and fourth centuries BCE. It is generally held to have seen the greatest and “purest” products of Greek genius.

Colchis Country at the eastern end of the Black Sea in present Georgia.

Coptic Language of Christian Egypt spoken until the fifteenth or sixteenth centuries CE. Coptic remains the liturgical language of Egyptian Christians or Copts. It is written in the Greek alphabet with some additional letters derived from Demotic.

Cuneiform A script developed in Mesopotamia using nail-shaped reed ends pressed into wet clay. The clay is then baked. The script was employed for various languages in southwest Asia from the Fourth Millennium BCE. It survived in Mesopotamia into the Common Era.

Cushitic A hypothetical branch of Afroasiatic situated in the Horn of Africa; see more under its families: Central, East and South Cushitic.

Cypriot Syllabary Syllabary distantly related to the Cretan Linear A and used on Cyprus into Hellenistic times.

Dark Ages (Christian) Name conventionally given to the period after the fall of the western Roman Empire in the fifth century CE and before the “Middle Ages” generally considered to have begun in the ninth and tenth centuries.

Dark Ages (Greek) Name given to the period after the fall of the Mycenaean palaces in the twelfth century BCE and before the rise of Archaic Greece in the eighth.

Demotic Strictly speaking Demotic is the script derived from Hieroglyphic used in Egypt after the seventh century BCE. The term is also used to describe the Egyptian language of the period. Without a capital letter the word indicates a language spoken by ordinary people regardless of time and place.

Dentals Consonants formed with the tongue against the teeth as, for example, /d/ and /t/.

Determinative Element in hieroglyphic representation that signifies the meaning of a word as opposed to its sound.

Diffusionism Belief that cultural characteristics can be transmitted from one culture to another, the opposite of isolationism. See also *modified diffusionism*.

Diodoros Sikeliotes (Diodorus Siculus) Greek historian from Sicily *circa* 80–20 BCE; he was known for his *Library of History*.

Dorians Greek tribe from northwest Greece who overran much of southern Greece in the twelfth century BCE.

Dravidian Language family possibly derived from Nostratic originally spoken from Iran to India. The best-known contemporary Dravidian languages are Tamil and Telugu which still flourish in southern India. The extinct language Elamite spoken in eastern Mesopotamia may be a branch of Dravidian.

Early Helladic A ceramic period, the name is applied to mainland Greece from 3300 to 2000 BCE.

Early Minoan A ceramic period, the name is applied to Crete in the Early Bronze Age 3300–2000 BCE.

East Cushitic Branch of Afroasiatic spoken in southern Ethiopia and Somalia. Its best-known language is Somali.

Ebla An ancient Syrian city first excavated in the 1970s. Around 2500 BCE it was the center of a major kingdom with extensive trading relations from Iran and Mesopotamia to Syro-Palestine and possibly Anatolia.

Eblaite The language of Ebla, this distinct Semitic language can usefully be seen as an indirect predecessor to Canaanite.

Egyptian In this book, this is not used to refer to modern Egyptian Arabic but to the language of Ancient Egypt, an independent branch of Afroasiatic. It has been subdivided into a number of phases. The first two are Old Egyptian spoken in the Old Kingdom *circa* 3400–2400 BCE and Middle Egyptian was the language of the Middle Kingdom 2200–1750 BCE. It remained the official written language for the next 1500 years. When “Egyptian” is not qualified it refers to this. Late Egyptian was spoken in Upper Egypt in the first half of the Second Millennium, before it became the national speech in the New Kingdom, 1570–1200 BCE. It was not written until the end of this period. For the later stages of the language, see Demotic and Coptic.

Elam Ancient civilization in eastern Mesopotamia and southern Iran from the Fourth Millennium to around 300 BCE.

Elamite Language of Elam. Some scholars link it to Dravidian; others to Munda in India and the Mon-Khmer languages of southeast Asia.

Ethiopia Name given by Greeks to places inhabited by peoples darker than themselves, thus much of Africa and Elam. From the fourth century CE it began to be limited to the north of the present Ethiopia.

Ethiopic Name of the very varied Semitic languages spoken in modern Ethiopia and Eritrea. These include Geʿez, the ancient language of the Ethiopian Christian Church; Amharic, the national language of Ethiopia; Tigrinia, spoken in northern Ethiopia and Eritrea; and the Gurage languages of the south. Some retain archaic Proto-Semitic forms.

Etruscan Civilization in ancient central Italy. Greek and Roman writers generally maintained that the Etruscans came from Lydia in north-western Anatolia. The Etruscan language, which is not well understood, could well be Anatolian. A very closely related language and script has been found on an inscription on Lemnos off the Turkish coast. Etruscan civilization was heavily influenced by Phoenician and Greek cultures from the ninth to the sixth centuries BCE. It was, in turn, a major element in the formation of Roman culture.

Euroasiatic Hypothetical hyper-family, including Indo-European, Uralic, Altaic, Korean, Japanese, Ainu, Tungus, Yukagir and Inuit. It is thought to be a branch of Nostratic.

Europe One of the three continents visualized by Greek geographers. It derived its name from some of the West Semitic root *ʿereb* (sunset or west). As a collection of complex promontories on the edge of the Euroasiatic landmass, it does not fit the normal definition of a continent.

Geʿez Most anciently attested Ethiopic Semitic language, it is still used today in church liturgy.

Genetic A genetic relationship between languages is one in which they are supposed to come from a single ancestor. For example, French, Spanish and Romanian have a genetic relationship because, for all their differences, they all derive from the “Vulgar” Latin spoken in the Roman Army. English does not come from this language group, but it is genetically related to these languages at a deeper level because they are all descendents of Proto-Indo-European (PIE).

Georgian People who have inhabited the central Caucasus since the earliest times. The Georgian language belongs to the Kartvelian language family.

Hadza A hunter-gatherer people living in Tanzania. Scholars dispute whether their language is an outlying branch of Khoisan or a linguistic isolate.

Hatti Ancient name for central Anatolia.

Hattic A non-Indo-Hittite language spoken in Hatti.

Hausa Westernmost and most widely spoken Chadic language, it is dominant in northern Nigeria.

Hebrew Canaanite dialect spoken in the kingdoms of Israel, Judah and Moab in the first half of the First Millennium BCE. For religious reasons it is often described as a distinct language. Modern Hebrew stems from a nineteenth-century revival of the language that had largely been restricted to religious use for two millennia.

Hellenic Greek or Greek speaking, but particularly associated with Thessaly in northern Greece. Since the late eighteenth century CE the term has gained many associations of nobility and northern Aryan “blood.”

Hellenistic The pejorative name given to the mixed Hellenic and “Oriental” culture found around the eastern Mediterranean after the conquests of Alexander the Great in the fourth century BCE until the incorporation of the region into the Roman Empire in the first century BCE.

Hieratic Egyptian cursive script based on the same principles as hieroglyphics used for writing on papyrus.

Hittite Empire in central Anatolia during the Second Millennium BCE. Its Anatolian language was first written in cuneiform and later in its own hieroglyphic system.

Hurrian A people living in Syria and eastern Anatolia in the Third and Second Millennia BCE. Their language was related to that of the later kingdom of Urartu and appears to belong to the Northeast Caucasian linguistic family, now surviving in Chechen and Ingush.

Hyksos Invaders from the northeast who dominated much of Egypt between 1725 and 1575 BCE. Most Hyksos appear to have spoken a West Semitic language, but they also seem to have included Hurrian and even Indo-Aryan speakers.

Indo-Aryan Branch of Indo-European spoken for many millennia in Iran and most of northern India.

Indo-European A subset of Indo-Hittite, it includes nearly all European languages and the Indo-Aryan and Tocharian language families. Although Phrygian and Armenian were situated in Anatolia, they are Indo-European languages and do not belong to the Anatolian branch of Indo-Hittite.

Indo-Hittite A language family that contains both Anatolian and Indo-European branches. It is sometimes seen as a branch of Euroasiatic and ultimately of Nostratic.

Inflected languages Languages such as Greek, Latin and German that rely to a great extent on inflection. Word shapes, or morphology, change, rather than syntax or word order, to convey meaning.

Interdentals Consonants formed by putting the tongue between the teeth as in /th/.

Ionians Central Greek tribal grouping that survived the northern conquests. Some Ionians migrated to the west coast of Anatolia.

Iron Age Period after the Bronze Age in which most tools and weapons were made of iron. In Greece, the term tends to be restricted to the first few centuries following the shift as later periods are given names from ceramic styles or written history.

Isolating languages Languages such as Hebrew, Chinese or English which have little or no inflection but rely heavily on syntax or order of words.

Isolationism The belief that cultures cannot be fundamentally affected by others. The opposite of diffusionism.

Kartvelian A Caucasian language family, the best-known example is Georgian. It is possibly an ancient branch of Nostratic.

Khoisan African language family spoken by hunter-gatherers in southern Africa but with possible distant outliers, Hadza and Sandawe, in Tanzania.

Labials Consonants formed with the lips such as /b/ and /p/.

Labiovelars Velars completed with a rounding of the lips as in the English /qu/.

Laryngeals Sounds made with the larynx or throat as a whole. More precisely, they can be divided into velar fricatives /ħ/ and /ǵ/, pharyngeals /ħ/ and /ʕ/ and laryngeals in the narrow sense /ʔ/ and /h/. All of these existed in Ancient Semitic and except for /ǵ/ in Egyptian. One or two survived in Anatolian languages, but all, with the very occasional exception of /h/, have disappeared from Indo-European languages.

Late Helladic or Mycenaean Ceramic period in mainland Greece *circa* 1675–1100 BCE.

Late Minoan *circa* 1675–1450 BCE. This period ended when the island became dominated by mainland Greeks or Mycenaeans.

Lemnos An island in the northeastern Aegean where a non-Indo-European language related to Etruscan seems to have been spoken into Classical times.

Levant A term used since the Middle Ages for the East in general and Syro-Palestine in particular.

Linear A A syllabary with determinatives used on Crete and elsewhere in the Second Millennium BCE, before the establishment of Greek on the island. It seems to have survived in eastern Crete into Classical, if not Hellenistic, times.

Linear B A syllabary with determinatives derived from a prototype of Linear A, used for writing Greek. It is attested from the seventeenth century BCE but may have originated earlier.

Liquids Consonants, such as /l/ and /r/, that flow.

Loan A word in which both the meaning and the sound have been adopted from a word in another language. For example, “kedgeriee” from the Hindi *khichri* “dish made with rice, butter, onions and other condiments” or “just” from the French *juste*. The impermanence suggested by linguistic use of the words “loan” and “borrowing” is misleading. It merely indicates the distaste among early nineteenth-century linguists for what they saw as the sully of a pure autochthonous language.

Lycia Ancient region in southern Anatolia. The extinct Lycian language was an indirect descendent of Hittite. Alphabetic inscriptions in Lycian date from the fifth century BCE.

Lydia Ancient region in northwestern Anatolia. The Lydian language belonged to the Anatolian family. Most ancient traditions maintained that the Etruscans came from Lydia. Alphabetic inscriptions in Lydian date from the fifth century BCE.

Mesopotamia Land between the two rivers Tigris and Euphrates, more or less corresponding to the modern Iraq.

Metathesis Alternation or switching of consonantal or vocalic position in language. An example of this can be heard in the alternation “ask” and “aks.”

Middle Helladic Ceramic period in mainland Greece from *circa* 2000–1675 BCE.

Middle Kingdom Egyptian historical period including the Eleventh, Twelfth and Thirteenth Dynasties from 2150–1750 BCE.

Middle Minoan Ceramic period in Crete, *circa* 2000–1675 BCE.

Minoan Modern name derived by Arthur Evans from Minos the legendary king of Crete. It is applied to the Bronze Age cultures of the island before the arrival of Greek speakers around 1450 BCE.

Modified diffusionism The belief that cultures can be modified or

transformed from the outside but that, in most cases, the changes take place only after considerable interaction with the local culture.

Monism In this book “monism” is used to describe the notion that things and processes tend to have single causes.

Monogenesis The belief in single origins, largely restricted in this book to humanity or languages. It is the opposite of polygenesis.

Morpheme Smallest meaningful linguistic unit.

Morphology Modifications of words to indicate such things as number, case, tense or temporal aspect.

Mycenae City near Argos in the northeastern Peloponnese, famous as the leading city in Late Bronze Age Greece.

Mycenaean Name of Late Bronze Age material culture, first discovered at Mycenae. By extension “Mycenaean” is used to describe Greek culture as a whole in that period.

Nadene Hypothetical ancient language hyper-family, whose branches include Northeast Caucasian, Sino-Tibetan and the American languages of Athabascan and Navaho. Connections with Basque and Nostratic have also been proposed.

Nasals Consonants such as /m/ and /n/ formed in the nasal passage.

Neo-Babylonian An empire ruled from Babylon that dominated much of Mesopotamia between the fall of the Assyrian Empire in 600 BCE and the rise of the Persian Empire some sixty years later.

Northeast Caucasian A branch of Nadene to which Hurrian and Urartu appear to have belonged and now represented by Chechen and Ingush.

Nostratic Hypothetical language hyper-family, possibly derived from Nadene. It includes Euroasiatic and Afroasiatic and possibly Kartvelian and Dravidian.

Old Kingdom Period of Egyptian strength and prosperity from the Third to the Sixth Dynasties 3000–2500 BCE.

Pelasgians According to classical traditions, the Pelasgians were the earliest inhabitants of Greece.

Persian Empire Founded by Cyrus the Great in the mid-sixth century BCE, it dominated southwest Asia, Egypt and much of the Aegean, until pushed back by an alliance of Greek city states. It was destroyed by Alexander the Great in the late fourth century.

Philistines One of the peoples coming from the Aegean and Anatolia who invaded the Levant and attacked Egypt in the thirteenth and twelfth centuries BCE.

Phoenicia Cities along a stretch of coast from Lebanon to northern Palestine. The most famous were Byblos, Tyre and Sidon. The name covers this region throughout antiquity. It is generally used, however, to refer to the period of the cities' greatest wealth and power 1100–750 BCE. The Phoenician language, like Hebrew, was a dialect of Canaanite. While the alphabet is often described as a Phoenician invention, it may well have developed in this region but long before the "Phoenician" period.

Phoneme A linguistic sign used for the differentiation of words with unlike meanings.

Phrygia Region in northern Anatolia. The Phrygian language is not Anatolian but Indo-European.

Pictogram Writing in which the object signified is pictured or directly represented. Hieroglyphics and Chinese contain pictograms but they also have abstract ideographic or phonetic symbols.

Polygenesis The belief in multiple origins, in particular of humanity or language. The opposite of monogenesis.

Prothetic or **prosthetic** Vowels placed at the beginning of words to replace lost consonants or avoid certain initial consonants. It is particularly common to avoid double consonants.

Ptolemaic Name given to Egyptian culture under the Ptolemies.

Ptolemy Name of the general who seized power in Egypt after the death of Alexander the Great and of his descendants who ruled Egypt for almost three hundred years until it was conquered by the Roman Augustus in 30 BCE.

Punic Latin name given to Phoenicians in the western Mediterranean and especially to its leading city Carthage. In the mid-First Millennium BCE when Aramaic and later Greek displaced Phoenician in the eastern Mediterranean, they survived as “Punic” in the west.

Root Essential immovable part of a word that remains after all the other parts have been removed.

Seleucid Dynasty established by Alexander’s general Seleukos in Syria and Mesopotamia.

Semantic Relating to significance or meaning.

Semitic Branch of Afroasiatic containing Ge’ez and other Ethiopic and South Arabian languages, Arabic, Akkadian, Eblaite, Canaanite, and Aramaic. It appears to have originated at the southern end of the Red Sea.

Sibilants Consonants with hissing sounds such as /s/, /š/, /ṣ/, and /z/.

Sidon Ancient Phoenician city dedicated to the sea god ṣid. Its apogee was in the very early Iron Age. Therefore, “Sidonian” was often used to designate Phoenician in Homer and the early books of the Bible. Its dominance was broken by Tyre during the ninth century BCE.

Stele Upright stone slabs with sculptured designs or inscriptions.

Stem Verbal form derived from the root by vocalization or the addition of prefixes, infixes or suffixes.

Stop A complete consonantal explosion of breath, as in the sounds represented by /b/, /p/, /d/, /t/, /g/ and /k/.

Sumerian Peoples inhabiting parts of Mesopotamia in the Fifth and Fourth Millennia BCE. Their language, which is neither Afroasiatic nor Indo-Hittite, was used for literary purposes and as a status marker for millennia after the speech died out.

Syllabary Script that represents syllables rather than single letters. They usually follow the pattern consonant-vowel. The best known contemporary syllabaries are the Japanese hiragana and katakana.

Syntax The order of words.

Theogony The ancestry or birth of the gods. It was the name and subject of a number of poems, the best known being that by Hesiod.

Thera Volcanic island seventy miles north of Crete. It suffered a major eruption in the mid-seventeenth century BCE.

Tokharian The name of a branch of Indo-European containing three languages still spoken in the First Millennium CE in the now Turkic Chinese “autonomous” region of Xinjiang (Sinkiang). The Tokharian languages share a number of features with European Indo-European languages not found in Indo-Aryan. It, therefore, provides critical information on the characteristics of early Indo-European.

Tyre Ancient Phoenician city, though established before the Second Millennium, its period of greatest wealth and glory was from the tenth to the eighth century BCE. It remained an important, economic, political and cultural center even after its destruction by Alexander the Great in 333 BCE.

Ugarit Major port on the Syrian coast. Archives from the end of the Second Millennium BCE, excavated there in the mid-twentieth century CE, have provided a mass of social, economic, political, religious and literary information.

Ugaritic The West Semitic language spoken at Ugarit. It was recorded in an alphabetic script on many of the tablets found in the city.

Urartu Kingdom in the southern Caucasus in the first half of the First

Millennium BCE. Its language was related to Hurrian and the present Northeast Caucasian languages.

Velars Stops formed by the tongue at the back of the mouth, for example, /g/ and /k/.

Vocalization Infusing a consonantal structure with vowels.

GREEK WORDS AND NAMES WITH PROPOSED AFROASIATIC ETYMOLOGIES

- ἄβδης, 419
 ἄβρός, 410
 ἄγα-, 406, 628, n.95
 ἄγαιος, 406
 ἄγαπάω, 207
 ἄγιος, 439
 ἄγλαός, 406
 ἄγλις, 355
 ἄγνος, 439
 ἄγος, 439
 ἀδάμας, 388
 ἀδελφός, 472–3
 Ἀδραστεία, 286
 ἸΑδωνις, I.86, 454, n.55
 ἀεντιον, 373
 ἄζομαι, 439–40
 ἀθάρη, 247
 Αθῆναι, II.81–3; 579–82
 ἸΑθήνη, 579–82
 ἀθήρ, 247
 ἀθρόος, 358
 -αι, II.390; 503
 αἰγίς, 548
 αἶγλη, 406
 Αἰγαιων, 177
 ἸΑίγυπτος, I.95; 148
 ἄτδηλος, 417
 ἸΑιδης, 238, 479
 αἰζηός, 396
 αἶητον, 406
 αἶκλον, 369
 αἶμα, I.59–60; 329
 αἶμασιά, 393
 αἰονάω, 372
 αἶνυμαι, 372
 αἰπόλος, 357
 αἶρα, 357
 αἶσα, 301
 αἶσσω, 393
 αἶτᾱς, 212
 αἶτιος, 426
 αἰών, 371–2

- ἙΑκαδήμεια, 376–7
 ἄκατος, 401
 ἄκη, 138, 420–1
 ἀκόντων, 386
 ἄκος, 373
 ἀκούω, 410–11
 ἀκρῖβής, 138
 ἀκτή, 356
 ἀλάβαστος (2001, pp. 141–142)
 ἀλαλά, 389
 ἙΑλαλκομήνη, II.85–7
 ἀλαός, 307
 ἀλήθεια, 333
 ἄλής, 414
 ἀλήτωρ, 450
 ἄλις, 414
 ἙΑλκμήνη, II.79–80, 105
 ἄλλομαι, 315
 ἀλύτᾱς, 417
 ἄλφα, I.39
 ἄλωπηξ, 369
 ἄμαθος, 219
 ἙΑμάλθεια, 287
 ἄμαλος, 355
 ἀμάρα, 342
 ἙΑμαρία, 355
 Ἑαμαρτης, 355
 ἄμαυρός, 205
 ἀμείνων, 300–301
 ἀμέρδω, 395
 ἄμη, 343
 ἄμης, 368
 ἄμμος, 219
 ἀμνίον, 362
 ἙΑμνίσσος, 285–6
 ἙΑμυκλαι, 326–7
 ἀμϋμων, 662
 ἀμϋνω, 384
 ἙΑμφι-, 503
 ἀνάγκη, 262
 Ἀνακτόριον, 260
 ἀνάξ, I.61–2, 94; 259–62
 ἀναυρος, 498
 Ἀνάφη, 487–8
 Ἑἀνεμώνη, II.261
 ἄνθος, 246–8
 ἙΑνίγρος, 498–9
 ἄνϋμι, 372
 ἄξιος, 301
 ἄοζος, 431
 ἙΑόνες, I.83; II.129
 ἄορ, 382
 ἀοσσέω, 431
 ἀπαλός, 410–11
 ἀπάτη, 406
 ἀπέλλαι, 455, 533
 ἀπήνη, 390
 ἙΑπίαν, I.92
 ἙΑπόλλων, I.67–9; 454–77
 ἄρά, 434
 ἄρακιν, 366
 ἄρακος, 341
 ἙΑργος, I. 76
 ἄρδω, 342
 ἀριθμός, 420
 ἀρκέω, 390–1
 Ἑαρμα, I. 60; 522
 Ἑαρμενα, 522
 ἙΑρμονία, II.103; 522
 ἄρον, 341
 ἀρπάζω, 394
 ἄρπη, 189, 394
 ἀρραβών, 169
 ἙΑρτεμις, I.68–9; 464–7
 ἄρτος, II.483
 ἄρχω, 390
 ἀσάμινθος, 2001, 413–14, n.59
 ἄσις, 200

ἀσκάλαβος, 463
 ἀσκέω, 2001, p. 305
 Ἀσκληπιός, 463–4
 ἄσμενος, 317
 ἀσπαλιεύς, 463
 ἀσπίς, 138
 Ἀσσωρόν, 494
 Ἀσταφίς, 350
 ἄστν, 138, 564
 Ἀστυπάλαια, 488–9
 ἀσφόδελοι, 322–3
 Ἀσώπος, 499
 Ἀταβύριον, I.375; 37–8, 139
 ἄτν, 406
 ἀτμήν, 411
 Ἄτλας, II.298–301
 Ἀττικά, 489–90
 αὐλή, 425–6
 αὐανή, 374
 αὐτός, 159–60
 αὐχίν, 203
 ἀφανρός, 205
 ἀφελής, 206
 Ἀφροδίτη, I.65–6; 234–7
 ἀφρός, 233
 ἀχαίνη, 370
 ἀχαΐνης, 341
 Ἀχαιοί, 215
 Ἀχάλιον, 341
 Ἀχέρων, 499
 Ἀχιλλεύς, 215
 ἄχνη, 341
 ἄχυρα, 341
 ἄχωρ, 341

 βαίνω, 326
 βαίος, 408
 βαῖς, 347
 βαίτυλος, 427

Βάκχος, 254
 βάλσαμον, 320
 βανωτός, 218
 βάραξ, 367
 βάρβαρος, 408–10
 βᾶρις, (1), I.61, 263; 400
 βᾶρις (2), 231–2
 Βασιλεύς, I.62; II.506; 167,
 219, 233
 βᾶσσοι, 367
 βαστάζω, 224
 βασυνίας, 219
 Βατίεια, 177
 βάττος, 211
 Βελλεροφών, 482
 βέλος, 391
 βεῦδος, 237
 βῆμα, 426
 βήξ, 347
 βῆς, 281–2
 βῆσσα, 367
 βῆτα, I.392
 βλαδύς, 367
 Βούβαστις, 237–8
 βουβών, 237
 βουκονιστήριον, 386
 βούλ-, 337–8
 βουνός, I.456, n.82
 Βραγχιδαι, 234
 βρένθος, 252–3
 Βριάρεως, 177, 481
 βυβλίνος, I.501, n.26; 402
 βύβλος, 146–7
 βύνη, 214
 βύρσα, 391
 βύσσοι, 175
 βύω, 175
 βωμός, I.59; 169, 426
 βωρεύς, 367

- Γάζα, 192
 Γαῖα, I.57–8; 147
 γάρ I.62; 157–8
 γάργαρα, 409–10
 γαυλῖς, 152
 γαυλός, 152, 308, 402
 γαῦλος, 152, 308, 402
 γε, 158–9
 γέλγῖς, 355
 γέφυρα, II.141
 γῆ, I.57; 147
 Γίγας, II.85
 γλαυκός, 578
 Γολγοί, 236–7
 Γοργώ, 578
 γλαῦξ, 578
 γνάπτω, 418–19
 γοργός, 578
 Γόρτυν, 505
 γράπις, 377
 γρόμφις, 377
 γρύψ, II.376–7
 γύης, I.57; 151–2
 γύλλος, 433
 γυμνός, 387
 γῶλος, 132
 γωρῦτός, 387

 Δάειρα, 239
 δαίμων, 285
 δαίω, 388
 δάκτυλος (1),(2),(3), 351–2
 Δαναοί I.95–7
 Δαναός, I.95–7; II.47; 418–23
 δαυλός, 408
 δάφνη, 476
 δείλος (δείδω) 326–8
 δεῖνα, 419
 δεῖπνον, 371

 δεκτή, 494
 δέλεαρ, 328
 δέλφαξ, 476
 δελφίς, 476
 Δελφοί, 472–3
 δελφύς, 472–3
 δέπας, II.396; 308
 δήιος, 388
 δηλέομαι, 388
 Δῆλος, 474–6
 Δημήτηρ, I.57; 147
 δῆμος, 308–10
 δήνεα, 388, 418
 δῆρις, 389
 δίβαν, 229
 δικεῖν, 494
 Δίκη, 494
 δῖφάω, 228
 δίφρος, 308
 δνόφος, 191
 δόλος, 328
 δόλπαι, 370
 δόλων, 388
 δόρπον, 370
 δοῦλος, I.60; 326–8
 δοῦπος, 181
 δρᾶω, 242
 Δρερός, 303–4
 δρῑμός, 388
 δύναμαι, 228–30
 δύνατος, 229–30
 δυτα, 426–7
 Δωδώνη, 187
 δῶρον (2), 388

 ἔβενος, 138
 ἔδαφος, 341
 ἐθέλω, 358
 ἔθνος, 202

- ἔθων, 382
 εἶβω, 435
 Εἰλείθυια, 287–8
 Εἰλωτες, 533
 εἶρερον, 414
 Ἑκάτη, Π. 484; 479
 ἑκατόν, 421
 ἔλατη, 337
 ἐλεγαίνειν, 436
 ἔλεγος, 436
 ἐλελεῦ, 389
 Ελεύθερος, 434–5
 ἐλέφας, Π. 482–3
 ἔλπος, 365–6
 ἔναρα, 383
 ἐνοπή, 389
 Ἑνυάλιος, 477
 Ἑνδυμίων, 306
 ἐξεράω, 372
 ἐορτή, 365
 Ἑπάφος, I.92
 ἔπερος, 357
 ἐπιζαρέω, 392
 ἐπίκουρος, 395
 ἐπισκύνιον, 376
 ἔραμαι, 206–7
 ἔρανος, 365
 ἔρεβος, Π. 93; 137, 171–3
 ἔρέθω, 371
 ἐρέφω, 360
 Ἑρεχθεύς, 203, 566–7
 Ἑρεχσέες, 203
 ἐρήμος, Π. 193; 389
 ἔρις, 391
 ἔρκος, 411
 ἔρμα, 520–2
 ἐρμηνεύς, 522
 Ἑρμῆς, 459–60, 520–3
 ἔρπις, 138, 365
 ἔρραος, 358
 Ἑρρος, 358
 ἐρυστήβη, 354
 ἔρχομαι, Π. 140; 390
 ἐσχάρσ, 439
 ἔσχατος, 422
 ἐταῖρος, 306
 ἔτελις, 366
 ἔτερος, 306
 ἐτιοκρίθος, I.453; 355
 ἔτνος, 366
 ἐτοῖμος, 328
 εὐθενεω, 358
 Εὐμολπίδες, 448–9
 εὐνή, 400
 εὐοχθος, 203
 Εὐρώπη, 466
 -εὐς, 157
 ἐφέται, 417
 ἔφηβος, 451
 ἔχθος, 203
 ἔχθρος, 203
 ἔψω, 366
 ζάθεος, 251
 ζακόρος, 431
 Ζάν, 479
 Ζεύς, 478–9
 ζέφυρος, 191
 ζόφος, 191
 ζῦθος, 371
 ζωρός, 371
 ἦ, 160–3
 ἦβη, 431
 Ηβη, 431
 ἡγανές, 387
 ἡγέομαι, 392
 ἡθανιον, 367

- ἡθέω, 366
 ἦια, 365
 ἡϊθεος, 212
 ἡλεητρον, 331
 ἡλέκτωρ, 331
 Ἡλύσιον, 266–7
 ἦμαρ, 137
 ἡμέρα, 137
 ἡπίαλος, 357
 ἦπιος, 418
 ἡπύτα, 417
 Ἡρᾶ, II.108
 Ἡρακλῆς, II.106–22
 ἦρως, II.106–122
 Ἡσίοδος, 296
 Ἡφαιστος, 477–8
 θᾶκος, 430
 θάλαμος, 427
 θάλασσα, 197
 θάλεια, 294
 θάλλω, 294
 Θαλῦσια, 295
 θάνατος, 409
 θάπτω, 428
 -θεν, 136–7
 Θελοπούσα, II.98; 301
 Θερσίτης, 389
 Θέσπια, II.499
 Θῆβαι, II.475, 502–503; 504
 θην, 418
 θής, 408
 θησαυρός, 301–11
 Θησεύς, 140, 565–6
 θιαγόνες, 370
 θίασος, 432
 θιβίς, 504
 θιώτης, 370
 θῆς, 197
 θλάω, 394
 θλῖβω, 394
 θνήσκω, 408
 θοίνη, 347
 θόλος, 660, n.13
 θολός, 378
 θορός, 377–8
 θρᾶνος, 428
 θραυπίς, 360
 θρίον, 351
 θρόνος, 429
 θρώσκω, 377–8
 Θύρις, 280, 282–5
 θύρσος, 433
 θύσανος, 431
 θῶω, 432
 Ἰακχος, 434
 Ἰαμβος, 357
 Ἰάρδανος, I.49; 486
 ἰβίς, 138
 Ἰδη, 352
 ἰδιος, 212
 Ἰδομινεύς, 483
 ἱερεὺς, 365, 430
 ἱερός, 430
 ἱημαλιά, 355
 ἱμβερίς, 654, n.154
 Ἰθάκα, 489–90
 ἰθουλίς, 366
 ἰθυμβος, 357
 ἰθύς, 421
 ἰκμαμενος, 375
 Ἰκαρος, 490
 ἰκέτης, I.97
 ἱμαλιά, 355
 Ἰναχος, I.94; 260–1
 ἰνάω, 137, 372
 Ἰνώπος, 474

- ἰξός, 347
 ἰός, 393
 Ιουλώ, 356
 ἰοχέαιραν, 465
 ἰσθμός, 400
 Ἰσμηνός, Π.499; 316, 466
 ἴσο-, 301
 Ἰτανός, 500
 Ἰτύκη, 489–90
 Ἰτῶνια, Π.82
 Ἰώ, I.95
 Ἰων, I.83–4; Π.129
 Ἰωνες, Π.129; 211

 Κάνθος, 255–6
 καββαλικός, 392
 Κάβειροι, Π.499, 629,n.20
 κάβος, 363
 Καδίστον, 494–5
 Κάδμος, 466
 κάδος, 364, 531
 καθαρός, 254–5
 καί, 157–8
 Καιάφα, 500–501
 καίμιον, 360
 καινός, 386
 καίνυμαι, 386
 καίνω, 386
 κάκεις, 370
 κάλαθος, 446–7
 κάλαμος, 346
 καλάσιρις, 387
 καλλιβάντες, 376
 Κάλλιον, 418
 καλ(λ)ός, 330–1
 κᾶλον, 401
 κάλχη, 331
 κάμαξ, 346
 κάμηλος, 352
 κάμινος, 370
Καναδόκα, 397
 Κάναθος, 255
 κάνθαρος, Π.396; 254–5
 κάννα, 423
 κανών, 423
 Κανῶπος, 518–19
 καπνός, Π.370; 370
 κάρ, 257–8
 κᾶραβος, 462
 Κάρια, 505–7
 καρόω, 395
 κάρταλλος, 447
 Κάρυα, 505–7
 κάρυον, 356
 κασάλβιον, 411
 κασᾶς, 411
 κάτα, 507
 καταίτυξ, 397
 καύαξ, 359
 Καφύαι, Π.142–3; 500–501
 κάχρυς, 200
 κέγχρος, 200
 κέδρος, 337
 Κέκροψ, 566–8
 κελαινός, 386
 Κένταυροι, 256–7
 κεπφος, 360
 κέραμος, Π.396; 408
 κῆβος, Π.388; 102
 κηθίς, 364
 κηκίς, 351
 κῆλα, 386
 κηλάς, 386
 κῆπος, Π.388; 102
 κήρ, Π.263–4; 257–8
 κηραφίς, 462–3
 κῆρυξ, 414–15
 Κῆρυκες, 451

- Κηφίσοι, I.49; II.19; 101-2,
 500-501
 κιβίσις, 556
 κιβώτιον, 446
 Κιθαιρών, II.499; 493
 κικί, 351
 κιλλός, 386
 κινέω, 244
 κίστη, 447-8
 κλάω, 196
 κλήμα, 196
 κλών, 196
 κλωνίζω, 196
 κλωνίτης, 196
 κνέφας, 191
 Κόδρος, 336
 κοινός, 146
 κόκκος, 350-1
 Κολαινίς, 377
 κόλαφος, 188
 κόλον, 377
 κόλπος, 376
 κόμμι, II.482
 Κοπίς, 528
 κορίαννον, 199
 Κόρινθος, I.50; 505-7
 κόρος, 199
 Κός, 463, 489
 κόσμος, 188, 338-9
 κοσυβ(άτ)ας, 432-3
 κοσύμβη, 397-8, 432-3
 κοῦκι, 350
 κο(υ)λέον, 386
 κρεμάννυμι, 196, 377
 κρημνός, 377
 Κρήνη, 377
 κρησέρα, 364
 Κρήτη, 490
 κρῑθή, 199, 355
 κρίνον, 345
 Κρόνος, 196
 κρουνός, 377
 κρωσσός, 363-4
 κτέρας, 433
 κτίζω, 692, n.208
 κύαμος, 354
 κυβερνάω, 402-3
 κυδαζω, I.60; 337
 κῦδος, I.60; 169, 336-7
 Κύθηρα, I. 382; II.148; 491
 κυλλήστις, 370
 κύμῑνον, 169
 Κύνθος, 256, 474
 κύπρος (1) & (2) 100
 Κύπρος, 100
 κώδεια, 354
 κώδεια, 354
 κώδων, 354
 κῶμα, 197
 κωμικός, 197
 κῶμος, 196
 κωμωδός, 197
 Κωπαίς, II.142-3; 500-501
 λά(μ)βδα, 419
 λάβρος, 381
 Λαβύρινθος, II.174-6
 Λάδων, II.99; 501
 Λαγχάνω, 414
 Λάθων, II.99; 501
 λάθυρος, 241
 λαικάζω, 412
Λακεδαίμων, 516-8
Λάκων, 516-8
 λάμδα, 419
 Λάμια, 369
 λαμπήνη, 390
 λαός, 321-2

- λαπαρός, 240
 Λαπίθαι, 246
 Λάρις(σ)α, I.76–8; 240, 507–8
 λάσιος, 353
 λαύρα, 240
 λαφύσσω, 365
 λαχαίνω, 353
 λάχεια, II.165; 353
 Λάχεσις, 414
 λάχνη, II.165; 353
 λάω, 303
 λέβης, 365
 λέγω, 333–4
 λεία, 320–1
 λείβω, 435
 λειμών, 240
 λείριον, 344–5
 λέμβος, 403
 λέπω, 320
 λεπρός, 320
 λεπτός, 320
 Λέσβος, 491
 λέσχη, 171, 240, 531–2
 λευκός, 384
 λέων, II.386; 215
 ληϊς, 320
 λήθη, 322
 ληκάω, 412
 Λῆμνος, 491
 Λῆτον, II.99
 Λητώ, 332, 466
 λιβρός, 662, n.55
 λικμάω, 362
 λίκνον, 241, 362
 λιμήν, 240
 λίμνη, 240
 λῖς (1), II.386; 215
 λῖτα, II.440
 λίτρα, 184–5
 λόγος, 333–4
 λοίτη, 428
 λόχος, 532–3
 λυκάβας, 457–8
 Λυκαβηττός, 576
 Λυκηγενής, 456–7
 λύχνος, 551
 λώβη, 381
 λώβηξ, 381
 λωτός, 332–3, 343–4
 μα, 271
 μάγδωλος, 392
 μάγειρος, 368
 μαζός, 302
 μαῖα, 501–2
 Μαιάνδρος, 501–2
 μαίνομαι, 501
 μαίομαι, 412
 μάκαρ 1.61; 270–1
 μάκελλον, 412
 μαλατήρες, 403
 Μαλεάτας, 464
 μαλάχη, 179
 μᾶνης, 362
 μανθάνω, 422
 Μαντινέα, 508
 μάρις, 362
 μάρτυρος, I.47; 418
 Μάσης, 521
 μάσθλης, 302–3
 μάστιξ, 302–3
 μαστός, 302–3
 ματέω (1), 412
 μάχαιρα, 171
 Μάχομαι, 395
 -μβος, 357
 Μέγαρα, I.50; 427, 508
 μέγαρα (1), 427, 509

- Μέθανα, 509–10
 Μεθώνη, 509–10
 μείρομαι, 270
 Μελάμπους, 449–51
 μέλε, 255–6
μελεαγρίς, 360
 μέλλω, 421
 μέλπω, 456
 μέλω, 421
 Μεμβλίαιος, II.294; 488
 Μέμνων, II.33
 μέφομαι, 437
 meritewo, 408
 μέρμῑς, 348
 μέρορες, 451, 489
 μέρος, 270
 Μέροψ, 449–51, 488
 μέχρη(σ), I.60
 Μῆλος, 491
 μηνύω, 412
 μιαίνω, 437
 μιν, 407
 Μινύοι, II.518; 305
 Μίνως, II.171–81
 μισέω, 302–3
 μισήτη, 302–3
 μίτος, 374
 μίτυλος, 410
 μνάσιον, 342
 μόθος, 509
 Μοθώνη, I.50; 508–10
 Μοῖρα, 269–70
 μοιχός, 408
 μόλις, 383
 μόνος, 421
 μόροξος, 203
 μόροχθος, 203
 μορφή, 456
 μόσχος, 278
 μοτός, 374
 Μοῦσαι, 278–9
 μοχλός, 202
 μῦθος, II.200; 175–6, 262
 Μυκῆναι, I.50; II.390; 510–11
 Μύκονος, 475
 μυρίκη, 347
 Μυρίνη, 177
 μύρρα, 373
 μυστήριον, 445–6
 μύτιλος, 410
 μῶϊον, 362
 μῶκος, 437
 μῶλος, 383
 μῶλυ, 177
 μῶμαι, 412
 μῶμος, 437
 Μῶτ, 227–8
 Νάβις, 538–9
 ναίω, I.60; 334–5
 νᾶνος, 201
 ναξος, 384
 Νάξος, 384
 νᾶός, I.60; 334–5
 νεᾶνίας, 408
 νεβρός, 277
 νεῖκος, 395
 νέκταρ, 287
 Νέμεοις, 304–5
 νέμος, 304–5
 νέμω, 304–5
 νέρτος, 554
 Νέστωρ, 483–4
 νεφροί, 276–7
 νήδυμος, 305–6
 Ν(η)έω, 335
 Νηρεύς, 334, 484
 νήσος, 487

-νθος, I.392
 νῆκη, 383-4
 νικύλεον, 348
 νικύρτας, 413
 νίτρον, II.482; 2001, 121
 νοέω, 303-4
 νομάδες, II.174; 304-5
 νομίζω, 304-5
 νομός, II.174; 304
 νόος, 303-4
 νόσος, 305
 Νυμάδες, 304-5
 νύμφαι, 239, 286-90

ξάινω, 315
 ξανθός, 177, 248-51
 ξένος I.60; 318-19
 ξέω, 315
 ξίφος, I.61; II.369-72; 384-5
 ξύλον, 315
 ξύν, 317-18
 ξύω, 315

ᾠ, 162-3
 ᾠασις, 342
 οβελός, 373-4
 Ὀγκά, II.100-104; 482
 ὀγκίον, 260
 ὀδελός, 373-4
 ὀδύναι, 290
 Ὀδυσσεύς, 382
 ὀθόνη, 137, 401
 οἶβος, 214, 366
 ὀιη, 214
 οἶομαι, 407
 οἶος, 421
 ὀιστός, 393
 οἶστρος, 393
 Οἶτη, 495

ὄκκαβος, 200
 ὄλβος, 406-7
 ὄλινοι, 360
 ὄλλιξ, 366
 ὄλλυμι, 356
 ὀλολύζω, 389
 Ὀλυμπος, 361
 Ὀμηρος, 296
 ὀμφή, 434
 ὄναρ, ὄνειρος, 179, 271
 ὀνθυλεύω, 368
 ὀπλα, 542-4
 ὀπτός, 366
 Ὀργάς, 353, 441
 ὀργάω, 441
 ὀργή (1), 441
 ὀργια, 442
 ὀρεχθέω, 438-9
 ὀρθός, 421
 ὀρκάνη, 411
 ὀρκος, II.104; 418
 ὄρμος, 522
 ὀρμών, II.103
 ὀρνυμαί, 384
 ὄρος, 422
 ὄρος, 493
 ὄροφος, 361
 ὀρύσσω, II.141
 Ὀρφεύς, I.171
 Ὀρχομενός, II.19
 ὀσιος, I.463, n.15; 437-8
 οὐλαί, 366-7
 οὐλος (3), 356
 οὐλος (4), 356
 Οὐλώ, 356
 οὐν, 158
 οὐραιος, 137-8
 οὐρανός, 360-1
 Ὀυρανός, 360-1

- οὐρία, 360
 ὄφις, I.171
 ὀχένω, 202
 ὄχθος, 203, 373
 ὄχλος, 138, 202
 ὄψον, 366

 Παίαν, 210
 παῖς, I.476,n.67; 211–13
 Παίονες, 210
 παίω, 335–6
 Παί(η)ων I.454,n.50; II.171;
 216, 456
 παλάθη, 368
 παλεύω, 359
 παλλακή, 396–7
 Παμισ(σ)ός, II.506; 502
 Πάν, II.171
 πάν, 211
 πανός, 368
 πάξ, 281
 παξαμᾶς, 368
 παρθένος, 239–40, 577–8
 Παρνᾶσσός, 496–7
 Παρνόπιον, 238
 πατάνη, 368
 πατέω, 383
 παύω, 335–6
 πέδιον, 226
 πέδον, 226
 πεῖσμα, 219, 400
 πέλαγος, 197, 396–7
 πέλεια, 219
 πέλεκυς, 104
 πελιός, 359
 Πέλοψ, II.456
 πέλτον, 428
 πέμπω, 408
 πενθός, 254

 πέπλος, 549–50
 πέρθω, 383
 περίνεος, 372
 πέρπερος, 415
 Περσεύς, 383
 πεσσός, 374
 πέσσω, 366
 πέτευρον, 226
 Πέτης, 566
 Πήγασος, II.94–5; 226
 πηγή, II.94–95
 Πηλαγόν, 218
 πηλαμύς, 215
 Πηλεύς, 215
 πήληξ, 383
 Πηνειός, II.99, 141
 πήνη, 390
 πηνήκη, 390
 πήρα, 218
 πίθος, 227
 πίναξ, 234
 Πῖσα, 184
 πίσεα, 342
 Πιθέυς, 477–8
 πλίκιον, 368
 πλίνθος, 2001, 413–414
 πλοῦτος, 238
 Πλοῦτος, 239
 Πνύξ, 225–6, 419, 576
 ποθέω, 227–8
 ποιέω, 335–6
 πολιός, 359
 Πόντος, II.252
 πόρκος, 213
 Ποσειδῶν, I.67; 480
 ποταμός, 239
 πραπίς, 217
 πράττω, 407
 πρέμνον, 216

πρημνάς, 215
 Πρίαπος, 234
 προύμνη, 216
 πρυμνός, 216
 πρύτανις, 418
 πτακάννα, 400
 Πτώων, 228, 497
 πυγμή, 226
 Πυθών, 467–9
 Πύλαιον, 488–9
 πύλη, 232
 Πύλος, 232
 πυραμίσ, I.47; 214
 πῶμα, 213

ράβδος, 419
 ῥαδάμανθυς, I.63; II.178–9;
 241
 ράδαμνος, 343–4
 ραδινός, 343–4
 ῥαριον, 240, 353
 ράφανος, 354
 ῥέᾱ, II.179–80; 480
 ῥήν, 475
 ῥήνεια, 475
 ῥησός, 398
 ρόμβος, 423
 ρομφαία, 394
 ῥωψ, 401
 ρύπος, 375

σαγήνη, 403
 Σαίτις, 497
 σάκος, 138
 Σαλαμίσ, 492
 σάλπιγξ, 2001, p. 342
 σάμαξ, 345
 σαμαρίχη, 413
 σαμβύκη, 398

Σαμοθράκη, 492
 Σάμος, I.49; 183, 492
 σανίς, 418
 σαπρός, 320
 Σαπυσέλατον, 487
 σάπφειρος, 266
 σάρι, 345
 σάρξ, 138, 612–13
 Σάρων, 492
 Σατάν, 436
 Σάτυροι, II.244; 251–2
 Σάτραι, II.244; 251–2
 σαχνός, 376
 σβέννυμι, 375
 σεβένιον, 349–50
 σέβις, 370
 σέβομαι, 440
 σειρά, 358
 Σειρήν, 233–4
 σέλας, 439
 Σελήνη, 439
 Σεμέλη, II.79–80
 Σέριφος, 492
 σέρφος, 319
 σέσελι, 350
 σηκός, 425
 σῆμα I.60; 139–40, 316
 σηπία, II.370
 σήπομαι, 320
 σήσαμον, 314
 σθένος, 513
 σίαλος, 358
 Σίβυλλα, 265
 σῖγα, 224, 307
 Σικυών, 511
 σικχός, 376
 αἰλβη, 369
 στῆμος, 2001, 74
 σινδών, II.482

- σῖνομαι, 385
 Σίντιες, 251
 σιρός, 363
 σισυμβριον, 354
 σῖτος, Π.483
 σίφαρος, 403
 Σιφνός, 493
 σκάλλω, 315
 Σκάμανδρος, 177, 249, 317
 Σκάνδεια, I.501, n.37; Π.148;
 491
 σκεύη, 362-3
 σκορπίος, 319, 463
 σκύλαξ, 314
 σκῦλα, 314
 σκυλεύω, 314
 σκύφος, 363
 Σμηνός, 316
 σμῖλη, 376
 Σμινθεύς, 317
 σορός, 433
 σουσον, 346
 σοφία (σοφός) 1.62; 262-4
 -σ(σ)ος, I.392; 119
 Σπάρτη, I.53, 512-16
 Σπαρτοί, 513
 σπάω, 322-3
 σπένδω, 436
 σπέος, 323
 σπεύδω, 322-3
 σπήλαιον, 323
 σποδός, 322-3
 σταλάσσω, 456
 στάζω, 456
 σταφυλή, 350
 στάχυν, 350
 στέμμα, 350
 στέφανος, 350
 στέφω, 350
 στήθος, 375
 Στήνεια, 436
 στίφος, 350
 στιφρός, 350
 στρατός, 307
 στυγέω, 440
 Στύξ, 440, 502
 Σύβαρις, 369
 συβαριτικοί, 265
 συλάω, 314-15
 σύν, 317-18
 Σῦρω, 375
 σφαγ-, 323
 σφαδάζω, 322
 σφάζω, 323
 σφαῖρα, 266-7
 σφακτηρία, 323
 Σφίγξ, 261, 291, 465, 497
 σφόδρα, 322-3
 Σχερίη, 266, 422
 σχεδία, 314, 422
 σχῆμα, I.60; 306
 σχοῖνος, 314, 346
 σχολή, 314
 σῶμα, 139-40
 σωννύω, 375
 σωρός, 375
 σῶς, 375
 Ταινάρων, 519
 ταριχεύω, 370
 ταρχύω, 370
 τάσσω, 198
 Ταῦγετος, 519
 τάφος, 428
 τάφρος, 428
 τέλλω, 207-9
 τέλος, 207-8
 τέλσον, 197

Τέλφουσα, II.98; 501
 τερέβινθος (τέρμινθος), 249
 τέφρα, 429
 τήκω, 242
 τῆλε, 268
 τιᾶρα, 229
 τίλλω, 378
 τίλος, 378
 Τιλφῶσια, II.95
 τῆμή I.61, 243-4
 τιμωρός, 243
 τινάσσω, 244
 τίνω, 242
 τίω, 242
 τόλμη, 389
 τοπεῖον, 423
 τόπος, 423
 τράμπις, 364
 Τρίτων, II.86, 250; 501
 Τροιζήν, 573
 τρύβλιον, 364
 τρύξ, 433
 τύβαρις, 351
 Τυνδάρεως, 534
 Τύρος, II.502-503; 134
 Τυρταῖος, 2001, 342
 Τῦφᾶων, 192
 Ὑάκινθος, 528-9
 Ὑάντες, I.83; II.129; 302, 407
 ὕβρις, 302, 407
 ὕλη, 315
 ὕπαρ, 274
 ὕστερικός, 445
 φαλλός, 202
 φάραι, 205
 φάρμακον, 373

Φάρος, 234
 φάσγανον, I.60; II.372-3; 397
 φάσσα, 359-60
 φαῦλος, 206
 φάψ, 359-60
 φελλεύς, 206
 φελλός, 206
 Φενεός, II.19, 141-2; 214
 φεννήσις, 218
 φήνη, 214
 φῆρος, 368
 Φθία, 226
 φθοῖς, 368
 φιάλη, 433
 φιδίτια, 533
 φίλος, 206
 φιλύρα, 206
 φλαῦρος, 206
 Φλέγυαι, 218
 φοῖβος, 213-14
 φοῖνιξ (1), 348
 φοῖνιξ (2), 348-9
 φοῖνιξ (3), 348
 φοῖνιξ (4), 348
 φοῖνιξ (5), 348
 φοινός, 348
 φόνος, 348
 φράζω, 205
 φρήν, 216-17
 Φρίξος, 498
 φύλαξ, 232
 φύλον, 232-3
 φῶς, 213
 χαβίτια, 370
 χαλεπός, 188
 χαλτνός, 363
 χάλιξ, 331
 χαλκή, 331

- Χαλκίς, 177–8
 χαλκός, II.252; 331
 χάννα, 203
 χάος, 201
 χαράδρα, 498
 χαράσσω, 498
 χάρτης, 200–201
 Χάρων, 536–7
 χείρων, 202
 χέραδος, 498
 χηλός, 433
 χῆρα I.62
 χῖδρον, 200
 χῖτλοι, II.484; 345
 χιλ-, II.482; 421
 χῖλος, 345
 χῖρας, 375
 χίτων, I. 41; II.440; 169
 χλαμύς, 392
 χλόη, 344
 χλωρός, 344
 χοιράς, 200
 χοῖρος, 200, 358
 χόρτος, 345
 χράομαι, 200
 χρεία, 200
 χρείος, 200
 χρείων, 200
 χρη, 200
 χρῆμα, 200
 χρησ-, 200
 χρόνος, 196, 201
 χρῦσός, I. 41; II.440; 167, 175
 χῶμα, 393
 χώρα, 200
 χορός, 200
 ψάγδαν, 224
 ψάλιον, 361–2
 ψαλῖς, 361–2
 ψάλλω, 329
 ψάμαθος, 219
 ψάμμος, 219
 ψάρ, 218
 Ψαφίς, 218, 511
 ψέγος, 224
 ψευδομαι, 178–9, 329
 ψέφας, 191
 Ψίλαξ, 223–4
 ψῖλος, 223–4
 ψύδραξ, 376
 ψυχή, II.264–5; 224–5
 ψυχρός, 224–5
 ψύχω, 225
 ψώρα, 329
 Ψωφίς, 218, 511
 ὠβαί, 535
 ὠγυγία, II.83–5, 301
 ὠδῆς, 219
 ὠθέω, 382
 ὠκεανός, II.501; 400
 ὠλένη, 360
 ὠρανός, 361
 ὠρος, 460–1

KEY

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Words and names in italics are not loans but calques.

LETTER CORRESPONDENCES

3-	=-α-	3bdw	ᾠΑβυδος	Er
3-	=-ιη-	3bw	Ἰηβ	Er
3-	=-ε-	3byn	ΕΒΙΕΗ	Č
3-	=-1-	3hw	ΛΕΗ	Č
-3-	=-α-	Hr m3h.t	Ἄρμαχις	Er
-3-	=-ε-	k3.w	-χε-	Er
-3-	=-ι-	s3 qd	σικετ	Er
-3-	=-ε-	P3 di -n	Πετε	Er
-3-	=-ο-	Hr p3 hrd	Ἄρποκρατης	Er
-3-	=-υ-	h3k	ῥυκ	Er
-3-	=-ρ-	‘s3	άιρα	Č?
-3	=-αι	b3	βαι	Er
-3	=-ø	hq3	ῥυκ	Er
-3	=-ο	k3	κο	Er
i-	=α-	imn	Ἄμουν	Er
i-	=ε-	ipip	Επιφι	Er
i-	=ι-	ir.t	ἱρι	Er
i-	=ο-	in-hr.t	ᾠΟνουρις	Er
i- +	=οι-	ipt	οιχφ(ε)ιω	Č
i-	=ου-	ir.t	οὐραῖος	Er
i-	=-ω-	iqr.t	-ωκρις	Er

i-	=ø-	ismʒ.t	σματ	Er
-i-	=-e-	P3 di -	Πετε	Er
i	=-εη-	P3 di St	Πετεησις	Er
-i-	=-ου-	qis	Κούσαι	Er
iw	=au-	iwn	αγαν-	Č
‘-	=α-	‘nnq.t	Ἄνουκισ	Er
‘-	=e-	‘npsʒy	επωε	Č
‘-	=ei-	‘nnt	εινε	Č
‘-	=o-	‘nn	ον	Č
		‘ns	ός	Plut. 10?
‘-	=-o-	ts‘rq	θοσολκ	Er
‘-	=-α-	R‘-	‘Ρα-	Er
‘-	=-α	(m)r-ms‘	λεμειοα	Er
‘-	=-η	R‘-	‘Ρη-	Er
‘-	=-ι	R‘-	‘Ρι-	Er
w-	=ø-	ws ir hp	Εαραπισ	Er
w-	=eio-	wpwt	ειοπε	Č
w-	=o-	Wnn nfr	Ὀνωφρις	Er
w-	=ου-	Wsr mʒ.t-Rj-	Ὀυσιμαρης	Er
w-	=ω-	Wsr.t	Ὠστρις	Er
-w-	=ευ	Dhwtj	Θέυθ-	Er
-w-	=-η-	K3 mwt.f	Καμηφισ	Er
-w-	=-αυ-	nw.t	Ναυκρατης	Er
-w-	=-οε-	wr.t	-οερ	Er
-w-	=-οη-	wr	-οηρ	Er
-w-	=-υη-	Swnw	Συηνη	Er
-w-	=-ου-	Mw.t	Μουθ	Er
-w-	=-ουη	tʒ wr.t	Θουηρις	Er
-w-	=-ευ	Dhwtj	Θέυθ-	Pl.
-w-	=ουου	hʒ.w	χουου	Er
-w	=-ø	ʒbw	Ἰηβ	Er
-w	=-ειο	wpwt	ειοπε	Č
-w	=-η	-nw	-νη	Er
-w	=-ο-	ʒbdw	ἸΑβυδος	Er

-w	=-ω	Šw	Σως	Er
w3-	=-ου-	Pr w3d.t	Βουτω	Er
-w3-	=-οϊ-	Ḥ m w3st	Χαμοῖς	Gd
w3w	=-οῦαιε-w3w		οῦαιε	Er
-w3w-	=-ο-	Wp w3w.t	’Οφωῖς	Er
wh3-	=οα-	wḥ3.t-	οασις	Er
w3h-i-	=α-	w3ḥ -ib R’	’Απριης	Er
wh3-	=αυα-	wḥ3.t	’αυασις	Er
b-	=ø-	bn	n	Čand V
b-	=eu	bnyt	εγνι	Č not V
b-	=ouw	b(i)nt	ογωνι	Č
-b-	=β-	b3	Βαι	Er
-b-	=φ-	bnw	φοίιξ	Er
-b-	=m-	b3lot	μελωτηω	Č Gk>Cpt.
-b-	=β-	3bḏw	”Αβυδος	Er
-b-	=-π-	w3ḥ -ib R’	’Απριης	Er
-b-	=-φ-	w3ḥ -ib R’	Ουαφρης	Er
-b-	=-μ-	-sbnbdd-	Σμενδης	Er
-b-	=-μμ-	3ḥ b-i,tn	χεμμις	Er
-b-	=-μπ-	tbn	τύμπανον	Er
-b-	=-w/ø-	Sbk	Σουχος Σοκ- Σεκ-	Er
-b	=β	gbb	κηβ	Er
-bs	=-ψ	pr nbs	πνουψ	Er
-b	=-m	nb	νιη	Č
-b	=-ιου	sb3	σιου	Er IV.82
-b	=-w/ø	Ḥrw ib	Εριευς	Er
p-	=π-	P3 di -	Πετε	Er
p-	=β-	Pr w3yt	Βουτω	Er
p-	=φ-	Pth	Φθα	Er?
-p-	=-π-	R-p’ t	Ορπαις	Er
-p-	=β-	inpw	’Ανουβις	Er
-p-	=-φ-	t3 rprpy.t	Τριφις	Er
-p	=-π	ḥp	’Απις	Er
-p	=-φ	’3pp	’Απωφος	Er
-p	=-ø	nfr ḥtp	Νεφωτης	Er

pʒ	=ψ-	pʒ šʒi	Ψαῖς	Er
pʒ	=πχ-	pʒ hnsʷ	παχων	Er
pʒ	=πε-	pʒ di St	Πετεησις	Er
pʒ	=πι-	pʒ rmt̥	πίρωμις	L&S
-pʒ--	=πο-	Ḥr pʒ hrd	᾿Αρποκρατη"	Er
pʒ-h	=φι-	pʒ hby	Φιβι	L & S
-pʒ-	=π-	-s pʒ mdw	᾿Εσπμητις	Er
pr	=π-	Pr nbs	Πνουψ	Er
pr	=πα-	Pr itm	Πατουμος	Er
pr	=β-	Pr wʒdyt	Βουτω	Er
pr	=φαρ-	Pr Ḥr mrtʷ	Φάρβαιθος	Č
-f-	=-φ-	Mn nfr	Μέμφις	Er
-f	=-β-	rnpt nfrt	Ρενπαναβρε	Sp
-f	=-π-	gf	Κήπος	Er
m-	=μ-	Mn nfr	Μέμφις	Er
m-	=b-	mnt	βεηε	Č
m-	=n-	mtw	ντε	Č
m-	=ø-	(m)r sn	λεσωνις	Er
-m-	=μ-	imn	᾿Αμουν	Er
-m-	=n-	pʒ šhmtʷ	ψεντ	Er
-m-	=β-	hnm.w	Χνουβις	Er
-μ-	=π-	rms	ρωψ	Er
-m-	=m-	hnm.w	Χνουμ	Er
-m	=-ø	šm	ωε	Č
n-	=ø-	Ns pʒ mdw	᾿Εσπμητις	Er
n-	=v-	Nt	Νηϊθ	Er
n-	=λ-	ntr	λίτρον	MA 63.4
n-	=m-	nsq	νοκς	Er.C
n-	=l-	nq' wt	ελκω	Č
n-	=l-	nḥm	ληεν	Č
n-	=r-	nmḥw	ρηηε	Č
-n-	=λ-	hnby	ἔβελος	MA 108
-n-	=μ-	tʒ rnn, wtt	Θερμουθις	Er

-n-	=-v-	Nwnw	Νουν	Er
-n-	=-r-	p(ʒ)-n-imnh̥tp	παρηνογτε	Č
-n-	=-ø-	S n Wsrt	Σεσωστρις	Er
-n	=-v	Mry imn	Μιαμμουν	Er
r-	= a-	rmni	αμοιι	Č
r-	= ρ-	R'	ῥα-	Er
r-	= λ-	(m)r šn	λεσωνις	Er
r-	=-ø-	Mry imn	Μιαμμουν	Er
-r-	= -ρ-	tʒ rpy.t	Τριφίς	Er
-r-	= -λ-	srk.t	Σελχίς	Er
-r-	= -v-	Mr Wr	Μνευίς	Er
-r-	= -λλ-	kršt	Κυλληστις	Er
-r-	= -vδ-	Mr wr	Μανδουλίς	Er-
-r-	= -φρ-	pʒ dydy R'	Πετεφρης	Er-
-r-	=-ρ	wr	-οηρ	Er
-r-	=-l	' r	αλ	Č
h-	=-ø-	hnby	έβενος	Er
h-	=-ø-	hp	ῥαπις	Er
h-	= ' -	hqʒ	ῥυκ	Er
h-	= χ-	hms.t	χαμψαι	Er
-h-	=-ø-	innh̥r.t	ῥονουρις	Er
-h-	=-σ-	whʒ.t	ὄασις	Er
-h-	=-φ-	-Sh R'	Σεφρής	Mn
-h-	=-χ-	Kʒ ih,,w	Καιεχως	Er
		smh,	ᾶσμαχ	F
---h	=-ø	Pth	Πθα	Er
hr-	= 'αρ-	Hr m ʒh.t	ῥαρμαχίς	Er
hr-	= 'Αρ-	Hr pʒ hrd	ῥαρποκρατης	Er
hr-	= 'ωρ-	Hr	ῥωρος	Er
hr-	= 'ερ-	Hr dšr	ῥερτωσι	Er
ht-	= 'α-	Ht w' r t	ῥαυαρις	Er
ht-	= 'αι-	Ht kʒ Pth	ῥαιγυπιος	Er
ht-h-	= 'αθ	Ht Hr	ῥαθυρ	Er

ḥ-	=χ-	ḥnty	χαντ	Er
ḥ-	=k-	ḥnt ḥty	Κεντεχθαι	Er
ḥ-	=σ-	ḥwfwy	Συφος	Mn
-ḥ-	=-ø-	Ḥqʒ.w ḥʒs.t	᾽Υκσως	Er
-ḥ-	=-χ-	Ḥr m ʒḥt	᾽Αρμαχίς	Er
-ḥ-	=-k-	-ḥr ḥpd knm.t	Χαπκενουμῖς	Er
-ḥ-	=-σ-	-bḥn	Βασανιτης	Er
ḥ-	=χ-	Ḥnm	χνουμ	Er
-ḥ-	=-χ-	ḥnt ḥty	Κεντεχθαι	Er
-ḥ-	=-κ-	Ḥr p ḥrd	᾽Αρποκρατης	Er
-ḥ	=-χ	Bḥ	Βουχίς	Er
s-	=σ-	Swnw	Συνηη	Er
s-	=z-	see Crum 65a for reverse in Coptic		
s-	=ξ-	sf.t	ξίφος	Er
s-	=ισ-	St	Ισις	Er
-s-	=-ø-	Pʒ ḥnsw	Παχων	Er
-s-	=-s-	Ḥr sʒ s.t	᾽Αρσησις	Er
-s-	=-v-	imsk	εμεωχε	C
-s	=-ς	Bs	Βησας	Er
š-	=s-	šndn.t	σινδων	Er
-š-	=-s-	šsm	σεσμε	Er
-š-	=-ξ-	mšwš	Μαξυες	Er
-š	=-ς	mšwš	Μαξυες	Er
q-	=κ-	qmy.t	κόμμι	Er
-q-	=-κ-	Ḥqʒ.w ḥʒs.t	᾽Υκσως	Er
-q-	=-χ-	Srq.t	Σελχίς	Er
-q-	=-κ	ṯ s ṯ rq	θοσολκ	Er
k-	=κ-	kʒkʒ	κικι	Er
k-	=χ-	kmt	Χημία	Plu
-k-	=-κ-	kʒkʒ	κικι	Er
-k-	=-χ-	kʒ	-χε-	Er
-k-	=-θ-	Wsrkwn	Οσορθών	Mn

-k	=-κ	kʒ Ĥr kʒ	Χοιακ	Er
-k-	=-χ	kkw	Χουχ	Er
g-	=κ-	Gb	κῆβ	Er
-g-	=-κ-	grg.t	Κερκε	Er
g-	=-t-	bgs	ρωτc	Č
t-	=t-	tʒ Rpy.t	Τριφίς	Er
t-	=θ-	tʒ wr.t	Θουερίς	Er
-t-	=-t-	pʒ itm	Πατουμος	Er
-t-	=-θ-	Srpt.mʒy sryw	Σερφουθ-	Er
-t-	=-ø-	ʼt-n-sbi	ΔΗCΘΒΕ	Č
-t	=-τ	N.t	Νιτ	Er
-t	=-θ	N.t	Νηϊθ	Er
-t	=-ις	tʒ Rpy.t	Τριφίς	Er
-t	=-ø	nw.t	νη	Er
tʒ -	=τ-	tʒ Rpy.t	Τπιφίς	Er
tʒ -	=τε-	tʒ ntr.t	Τεντυρα	Er
tʒ -	=θ-	tʒ wr.t	Θουηρίς	Er
tʒ -	=θα(η)-	tʒ S.t	Θαησιος	Sp
ṭ-	=τ-	ṭmʒ.t	Τωμ	Er
ṭ-	=θ-	ṭny	θις	Er
ṭ-	=σ-	ṭb ntr	Σεβένντος	Er
-ṭ-	=-τ-	ṣt.t	Σητις	Er
-ṭ-	=-θ-	imn R' nsw,t-ntrwbw	Ἄμονρασωνθηρ	Er
d-	=τ	dmy	τωωνε	Č
-d-	=-ø-	hr-ḥpd knm.t	Χαρκνουμις-	Er
-d-	=-τ-	pʒ dy-	πετε-	Er
-d-	=-n-	mdt rmt nmh	μητρημε	Č
-d-	=-θ-	spd.t	σωθις	Er
-d	=-τ	Hr pʒ hrd	Ἀρποκρατης	Er
Dh-	=θ-	Dhwṭy	Θωθ-	Er
-dh-	=-θ-	nʒ idh.w	-ναθω-	Er

<u>d</u> -	=τ-	<u>d</u> ´nt	Τάνις	Er
<u>d</u> -	=s-	<u>d</u> ʒ <u>d</u> ʒ	σιση	LSJ
- <u>d</u> -	=-τ-	r- <u>d</u> bʒ	ΕΤΒΕ	Č
- <u>d</u> -	=-δ-	ʒb <u>d</u> w	᾽Αβυδος	Er
- <u>d</u> -	=-θ-	B <u>d</u> w	Βοηθος	Gd
- <u>d</u> -	=-τ-	wʒ <u>d</u> .t	Βουτω	Er
- <u>d</u>	=-t	rw <u>d</u> w	ρῶτ	Č

Abbreviations

Č: Černy, 1976

Er: "Verzeichnis der in den Hauptbänden angeführten griechischen Wörter," Erman and Grapow, 1982, Vol. VII, 245–250.

Gd: Gardiner, 1957.

LSJ: Liddell, Scott and Jones, *Greek English Lexicon*

M-A Muss-Arnolt, 1892

Mn. Manetho, 1940.

Pl. Plato *Phaedrus*

Plu: Plutarch. *De Iside et Osiride*,

Sp. Spiegelberg, 1907.

V. Vycichl, 1983.

Hebrew correspondences

Masoretic/Septuagint (Astour, 1967b. 293)

	spirantized		
ב	β, π, φ	β, ββ, φ	+sibl ψ
ג	γ, κ,	γ, κ, χ	
ד	δ, τ,	δ, θ	
ז	ζ, σ,	σ	
ח =h	χ, κ,	χ, κ,	
ט	τ, θ, δ	τ, θ, δ	
כ	κ, χ, κχ, γκ,	κ, χ, κχ	
פ	π, φ	π, φ	+sibl ψ
ק	κ, γ	κ, χ	
ש	σ, ζ,		germinated
ת	τ, θ,	τ, θ, τθ,	ττ, θθ,

Masson, E. (1967) M-A

ָ ;	-ω	קָךְ	κιττώ
ָ -;	-α-	יִשְׁפָּץ	ἵασπις
ָ -ב-	-υ-	נָבַל	ναύλας M-A128
-ד-	-ττ-	קָךְ	κιττώ
ד	-τ-	יִד	ιώτα
ָ -;	-α	מָנָה	μάς
-רָ -	-αρ-	נָרַד	νάρδος
-ו-	-ω-	עָרְבָן	άρραβών
-ו-	-υ-	בּוּץ	βύσσος
ָ -	-αυ-	גָּלָה	γαυλός
ה-	ά-	hariṣu	ἄριζος
י-	ι-	יִשְׁפָּץ	ἵασπις
כ-	σκ-	כְּמוֹן	σκαμμωνία Chantraine
-ל-	-λ-	daltu	δέλτος
-ל-	-λ-	גָּלָה	γαυλός
מ-	μ-	מָנָה	μνας
נ-	ν-	נָרַד	νάρδος
נ-	μ-	נָתַף	μέτωπον Chantraine
-נ-	-ν-	מָנָה	μνας
-נ-	νν	קָנָה	κάννα
ס-	σ-	סָף	σιπύη
ע-	ά-	עָרְבָן	αρραβών
-צ-	-ζ-	hariṣu	ἄριζος
-צ-	-σ-	קָצִיעָה	κασία
-ץ	-σσ-	בּוּץ	βύσσος
ק-	-ζ	קִבְעָה	ζάβατος
-ק-	-κκ	שָׁק	σάκκος
-ר-	-ρρ-	עָרְבָן	άρραβών
ש-	σ-	שָׁק	σάκκος
ש-	σ-	ššmn	σήσαμον
-ש-	σ-	ššmn	σήσαμον
-ש-	-d-	כְּשׁוּאָה (ת)	καδύτας M-A 104

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INDEX

- Aarsleff, Hans 31–2
 Abkhaz 13
ablaut 191
 Adams, Joyce 259
 Adams, William 68
 Afroasiatic origins 49, 68–82
 agricultural origins 52–3, 61
 Ahl, Frederick 304
 Ainu 13, 42
 Aiskhylos 176, 260, 417, 464, 547
 Akhilles 215, 249
 Albanian 178, 273
 Albright, William F. 146, 157, 180, 215, 526, 556
 Alford, Garth 174, 266
 alphabet 141
 Altaic 13, 42–3, 126
Amarna Letters 349
 Amasis, 546–8, 550
 Amenemhet 570–1
 Am(m)on 453, 478–9
 Amorite 112, 212
 Amyklai 519, 525–8, 530, 535
 *Anat 541, 553–6, 558, 560–3, 575
 Anatolian languages 91–2, 113
 Ancient Model (Revised) 168, 544, 550, 565
 Antinoos 438
Antiquity 2
 anti-Semitism 12, 37
 Anttila, Raimo 207
 Anubis 221, 512, 516–9, 522–4, 535–6
 Aphrodite 234–7, 454
 Apollo 176, 210, 218, 238, 256, 291–3, 316, 454–70, 488, 506, 525–8, 535–6, 572–3
 Apollodoros, 448, 545
 Apollonios of Rhodes 461, 488
 Apuleus, 442–4, 446, 451
 Arbeitman, Yoël 514, 536
 Areios 513, 537
 Aristaios 289
 Aristarkhos 27
 Aristotle 354, 361, 531, 565
 Armenian 18, 91–6, 103, 428
 Artemis 285–6, 291–2, 294–6, 377, 454, 464–6, 469–71, 474, 506–7, 510, 532, 553, 555
 Arya(n) 95–6
 Aryan Model 17, 168

- Ascoli, Graziado Isaia 31
 Ašerah 562
 Asklepios 463–4, 527
 Assmann, Ernst 494
 Assmann, Jan 443–4
 'Astar(te) 105–6, 552, 556
 Asterios 547, 550, 552
 Astour, Michael 3–4, 170, 172, 177, 251, 254, 294, 326, 400, 432–5, 463, 467, 482, 488, 491–2, 497, 499, 503, 515, 526–7
 Athena 453, 540–82
 Athenaios 344, 367, 378
 Atum 426, 464, 468–9
Ausnahmslosigkeit der Lautgesetze 34
 Austin, Norman 458
 Austronesian 30
 Avestan 133
- Ba 252–3, 286
 Badarian 83–4
 Baghdad 264
 Baines, John 482
 Bantu 14, 59–60, 76–7, 79, 100
 Barb, A. A. 444
 barley 50, 61
 Barthélemy, Jean-Jacques 28–9, 173, 418
 Basque 38, 41, 95
 Bates, Oric 548
 Beckerath, J. von 575
 Beekes, Robert 320
 Behemoth, 69
 Beja 12, 68, 71–2, 74, 77–8, 81, 89, 269
 Beloch, Julius 37
 Bender, Lionel 59, 75–7, 104
 Benfey, Theodore 215
 Bennet, Carl O. 237
 Bentley, Richard 141
 Benveniste, Émile 225, 309, 326, 353, 366, 387
 Bérard, Victor 253–4, 452, 491, 495, 498, 500
 Berber(s) 12–13, 68, 71, 74–7, 100, 107, 111, 113, 195, 278
 Bēs 281–2, 296, 298
 biconsonantal 73, 82
- Bietak, Manfred 385, 507
 Bing, Peter 476
 Birch, Samuel 173
 Blažek Václav 99
 Blegen, Carl 119, 486
 Blench, Roger 59–60, 63, 70, 72, 74, 78, 82–3
 blue eyes 578–9
 Bochart, Samuel 23, 173, 321, 427, 481, 487, 493
 Boisacq, Émile, 166, 262, 344, 356, 390
 Bomhard, Allan 42, 44, 50, 97–9, 101–3, 105, 134, 142, 150, 172, 258, 308, 327, 335, 396, 432
 Bonnet, Hans 248
Book of Coming Forth by Day (Book of the Dead) 213, 238, 296
 Bopp, Franz 31–2
 Botticelli 234
 Bovidian 61, 66, 83
 Brooks, Alison 63
 Brosman, Paul 110
 Brown, John Pairman 106, 170, 172–3, 184, 326, 378, 396, 426, 433, 532
 Brugmann, Karl 31, 109–10, 197, 262–4, 316, 393, 438, 441
 Brugsch, Heinrich 173, 248
 Burkert, Walter 3, 5–6, 35, 37–8, 265, 285, 478, 518, 526, 534
 Burton, Anne 138, 564–6
 Bury, J. B. 269–70, 512
 Butzer, Karl 65
 Bʷāzža 282
 Byblos 146, 149
- Caland's Law 203, 323
 Calice, Franz 245
 calque, 17
 Camps, G. 63–4, 66
 Canaanite: definition 189–90; origins 87–88
 Capsian 74
 Caria(n) 92, 505–7
 Carpenter, Rhys 180, 526
 Cartledge, Paul 526–7, 529–30
 Çatal Hüyük 16, 52, 93

- Cavalli-Sforza, Luigi 56, 72
 centaurs 256
 Černý, Jaroslav 206, 314, 343, 354, 359,
 366, 400–401, 406, 438
 Chad, Lake 61, 67
 Chadic (languages) 12, 15, 44, 67–75,
 81–3, 100, 111, 113, 183, 195, 206,
 246, 278
 Chadwick, John 141, 168, 220–3, 227,
 308–9, 327, 364, 477, 502, 505, 518
 Champollion, Jean-François 572
 Chang Tsung-tung 101
 Charles-Picard, Gilbert 180, 444
 Chechen 125
 child sacrifice 552–3, 558–60
 Childe, Gordon 5, 53–5
 Chinese, 14, 50, 99, 101, 103, 246–7
 Chomsky, Noam 6
 Chukchi 43
 Cicero 579
 Cintas, Pierre 180
 Clackson, James 137, 172–3, 428
 Clapham, L. R. 228
 Clark, J. Desmond 63
 Clement of Alexandria 263, 446
 Cohen, David 101, 147, 351
 Cohen, G. L. 206
 Cohen, Marcel 147
 Collinge, N. E. 125
 Cologne school 5–6
 Condillac, Etienne 31
 Cook, Erwin 174
 Crowley, Janet 570
 Crum, Walter 345, 447
 Cuny, Albert L. M. 41
 Curtius, Georg 31, 166, 215
 Cushitic 67–8, 73, 75–7, 81, 111, 246
 Cushitic: East 12, 44, 68, 71–2, 81, 107,
 211, 228, 269; Central 12, 72, 77,
 245; South 12, 69–70, 72, 77, 79–81,
 89
 Cyclad(ic) 54
 Cyprus 100, 236–7
 Dahalo 80–1, 183
 Danaos 547, 564, 568, 574
 Daniel, Constantin 174, 220, 271, 340,
 344, 346, 362, 367
 Darwin(ian) 33, 585
 Davison, J. A. 550
 De Santillana, Giorgio 550
 definite article 17, 20, 160–3, 209–10
 Degérando, Joseph-Marie 31
 Deir el Bahri, 408
 Delbruck, Berthold 31
 Delos, 219, 454–5, 470, 474–6, 505
 Delphi 218–9, 454–5, 464, 467, 472–3,
 507
 Demeter 146–8, 353, 355–7, 441, 451
 demon(s) 283–5
 Dennis, G. 182
 Dévaud, Eugene 343
 Diakonoff, I. M. 72–5, 77, 142–3, 145
 Diderot, Denis 31
 Dido 561–2
 Dietrich, D. C. 455, 526
 Diodoros Sikeliotes 138, 302, 451, 532,
 541, 549, 564–7, 569, 572, 574
 Diogenes of Babylon 549
 Diogenes Laertius 263
 Dionysos 196, 224, 233–4, 252, 277,
 432–5, 442, 449–50, 523–5, 535, 553
 Diop, Cheikh Anta 231
 distinct phonetic treatments 246–7
 Dixon, Robert 74, 83
 Dodds, E. R. 285
 Dodona 187–8, 478
 Dolgopolsky, Aharon 42, 44, 50–1, 56,
 98–9, 101–2, 432
 double aleph 19, 194–8
 Dravidian 13, 42–3, 51, 56, 59, 99, 101–
 2, 125
 Drews, Robert 531
 Dumézil, Georges 110
 Durant, Will and Ariel 5
 Dussaud, René 560
 Ebla(ite) 16, 45, 86, 100, 108, 112–3,
 132, 136, 143, 172, 189–90, 318
 Edel, Elmar 223
 Edwards, Ruth 4
 Egberts, Arno 540, 577–8, 580–2

- Egyptian language (origins) 73–4, 83–6
 Ehret, Christopher 52, 59, 70, 73–4, 77–8, 80, 142, 144, 282, 304
 Eileithyia(i) 287–8, 292–3, 295–6, 474, 521
 Elam(ite) 97, 114, 127, 132–3
 Elderkin, Derek 80
 Eleusinian Mysteries 247, 260, 281, 353, 433–4, 441–52, 528, 566–7
 Eliade, Mircea 281
 Ellenbogen, Maximillian, 391
 Elmolo 63, 67
 El Sayed, Ramadan 579
 emphatics 124, 129
 English (dialects) 47
 Epipaleolithic 64–5, 70, 83
 Erekhtheus 309, 542, 566, 572
 Erichsen, W. 173
 Eritrea 73, 81–2
 Erman, Adolph 173, 223, 258, 400, 429
 Ernout, A. 181, 185, 229, 238, 269, 277, 304, 332–4, 346–7, 352, 357–8, 376, 391–2, 396, 440, 463, 490
 ‘Esmun 316
 Ethiopia 29, 61, 75, 77, 80–2
 Etruscan(s) 180–3, 204, 514–5, 536
 Euripides 175, 470
 Euroasiatic 13, 39, 43, 51–2, 57, 79, 88, 92, 109, 112–3
 Europa 471
 Evans, Arthur 5, 282, 545, 570, 577
 explosions: Afroasiatic 60; linguistic 60

 Farafra 67
 Farnell, L. R. 454, 457–9, 526, 540
 Faulkner, Raymond 348, 388, 429
 Fayoum, 66
 Fecht, Gerhard 148
 Fick, August 244, 334, 356, 486, 498–9, 502, 513
 Finland 118
 Finley, Moses 5
 Fleischer, H. L. 445
 Fodor, Istvan 110, 113
 Fonterose, Joseph 218, 256, 555
 Foucart, Paul 302, 444, 450, 566

 Fournet, Jean-Luc 174
 Franks 13
 Frazer, James 250, 497, 499–500, 510, 556, 572
 French vocabulary 380–1
 fricative laterals, 21–2, 319–22
 Fulani (Fulbe) 100

 Gaelic 14
 Gamkrelidze, Thomas V. 16, 44, 92–107, 123, 125, 215, 331, 335, 394
 Gardiner, Alan 192–3, 225, 231, 252, 261, 344, 360–1, 373, 419, 460, 496, 515, 534, 542, 551, 575, 577, 580–1
 Gaster, Theodore 470, 554
 Gauthier, Henri 545, 577
 Ge’ez 29
 Gelb, I. J. 45, 150–1, 165
 Gell, William 572
 gender: active-inactive 113–4; sex linked 15, 44, 46, 71, 79–81, 88–9, 108–115
 “genii” 282–4, 292–4
 geological (modeling) 33, 35, 37
 Georgian 13, 16, 41
 Gimbutas, Marija 94–5
 glottalics 124–5, 130
 glottochronology, 43, 51
 Goodenough, W. H. 95
 Gordon, Cyrus 3–4, 122, 128, 326, 401
 Gorgon 541, 552–3, 555–6, 578
 Gothic 211
 Gould, Stephen J. 33
 Grapow, Hermann 429
 Graves, Robert 389
 Greenberg, Joseph 15, 39–40, 43–4, 58–60, 67, 78–9, 85–6, 192, 203
 Grimal, Nicholas, 84
 Grimm, Jacob 31, 248
 Griffith, R. Drew 174, 271
 Griffiths, Gwyn 443, 447
 Guanche 348
 Gunn, Battiscombe 173
 Gurage 15, 135, 146, 150–1, 269, 278, 318, 472

 Hadad 238

- Hadza 78–9, 89
 Halevi, Judah 29
 Haley, J. 119, 486
 Hamp, Eric 40
 Hampe, Roland 283, 285, 289, 295
 Hani, Jean 351, 444
 harpoons, uniserial 61, 65–6, 69
 Harran 264
 Harris, Zelig S. 136, 145, 162
 Harrison, Jane 389, 434, 437
 Hassan, Fekhri 66
 Hathor 236–7, 382
 Hattic 97–8, 114
 Hausa 12, 42, 69–70
 Hebrew: as original language 41, 168;
 treatment of foreign words, 223
 Hekataios of Abdera 538
 Hekataios of Miletos 519, 568
 Helck, Wolfgang 570
 Helios 458–60
 Hemmerdinger, Bertrand 174, 271, 341,
 344, 385
 Hephaistos 251, 317, 453, 477
 Herakles (Hercules) 180, 250, 398, 467
 Heraklides of Pontos 459
 Hermes 293, 458–9, 512, 518–22, 535–7
Hermetica 7
 Herodotos 176, 187, 233, 239, 278, 344,
 348, 351, 370, 387, 449, 453, 460,
 479, 484, 489, 506, 530, 534, 545–6,
 548, 551, 560, 563, 567, 575, 582
 Hesykhios 358, 368, 373, 376, 387, 402–
 3, 466, 575
 Hesiod 20, 163, 195, 201, 226, 234, 255,
 271, 296–7, 327, 356, 382, 387, 398,
 454, 456, 465, 474, 543
 Hetzron, Robert 143, 150
 Hippocrates 216
 hippopotami 70, 279–80, 283, 287, 292,
 570, 575
 Hittite 36, 45, 91–2, 112
 Hoberman, Robert 44
 Hoch, James 88, 149, 349, 368, 383
 Hodge, Carleton 42, 49–51, 175, 259,
 513
 Hoffmann, O. 262
 Hoffmeier, James Karl 310
 Holocene 15, 63, 65–7, 73
 Host-Warhaft, Gail 435
 Homer 128, 163–4, 175–6, 262, 296,
 327, 373, 454, 457, 465, 531, 543
 honey, bees 103–4, 294, 286–9, 297,
 370
 Hopper, Paul 44, 123
 Horapollo 277
 horns, 382
 Hornung, Eric 468
 Horsiesis 443–4
 Horus 210, 284–5, 456, 460–2, 527, 535,
 572, 576
 Hudson, G. F., 269
 Humboldt, William von 31–2, 117–8
 Hungarian 167–8
 Hurrian 92, 98, 114
 Hvidberg-Hansen, F. O. 555, 560
 Hyakinthia/os 442, 512, 525–9, 535
 Hyksos 2, 470, 520, 542, 544, 554, 568,
 574–6
Hymn to the Delian Apollo 213
 hyper-families 39

 Iamblikhos, 176
 Ice Age 60–1
 Idalion 237
 Ik 303
 Illich-Svitich, Vladislav 42
 Imhotep 463
 Indo-Aryan (Iranian) origins 32, 95–6,
 104, 132
Indoeuropaisch 32
 Indo-European origins 90–6
Indogermanisch 32
 Indo-Hittite origins 49, 55, 90–6
 Inuit 13, 42–3
 Irish, 14, 118, 447
 Ishango 65
 Isis 286, 510, 523
 Ivanov, Vjačeslav, 16, 92–107, 123, 125,
 215, 331, 335, 394
 Jablonsky, Paul Ernst 224
 Japanese, 13–4, 43, 223, 246–7

- Jasanoff, Jay 119, 171–2, 195, 220–3,
 243, 246–7, 257, 318, 327, 330, 335–
 7, 384–5, 486, 499–501, 504, 507,
 510, 517–18, 582
 Jephthah 435
 Jernstedt, P. V. 174–5, 213, 262, 340,
 354, 375, 382, 439
 Jōmon, 63
 Jones, William 30–2
 Josephus 190, 537, 575
 Joüon, Paul 505

 Ka 285
 Kadmos 255–7, 467, 470, 483, 513, 532,
 568
 Kalahari 65
 Kalauria(n amphictiony) 573–4
 Kallimakhos 218, 251, 288, 290, 474,
 491
 Kamerzell, Frank 198
 Kanop/bos 512, 518–9, 528
 Kaplony, Peter 258
 Kartvelian 13, 16, 42–3, 92–3, 98–9,
 114, 125
 Karum Kanesh 91, 114
 Kas (Ulu Burun) 2, 248
 Katanda 65
 Kaufman, Terrence 117
 Kawi (Old Javanese) 118, 168
 Keberan 52, 57
 Kees, Hermann 516
 Keita, Shomarka 72
 Kekrops 294, 309, 542, 566–8, 571–2,
 579
 Keller, O. 445
 Kemp, Barry 569
 Kenya 59, 67, 77, 80
 Kerns, John 46, 51, 97–8, 102–3, 105,
 335
 Kharax of Pergamon 566, 579, 582
 Khartoum 66; Mesolithic 61, 64, 68;
 Neolithic 68
 Khazars 168
 Khoisan 15, 46, 58–9, 72, 75, 78–81, 89,
 108–9, 111
 kidneys 276–7

 Kitto, H.D.F. 5
 Klein, Ernest 407
 Knossos 541, 544, 552–3, 558, 562
 Koenen, Ludwig 4–6, 9
 Kongo-Saharan 59
 Konkani 110
 Kordofan 60
 Korean 13, 42–3, 167
 Krappe, A. H. 271
 Kretschmer, Paul 119, 147, 431, 568
 Kristeller, Paul O. 6–9
 Kurgan culture 91, 94–5
 Kyrene 289

 labiovelars: Egyptian 148–9; Greek 142,
 151–2, 182, 221–2, 472–3; Semitic
 142–8
 Lagarde, Paul 266, 351, 393
 Lakedaimon 512, 516–19
 Lakonia(n) 512, 516–20, 526–7, 530–2,
 537
 Lambrou-Phillipson, C. 552
 Landau, Oscar 449
 language families 28–9
 language of the gods 176–7
 Laroche, E. 308
 laryngeals 17, 36, 128–9
 Latin origins 48
 Laurion 3
 lead isotope analysis 3
 Leake, William Martin 575
 Lefkowitz, Mary 442
 Lejeune, Michel 173, 222
 Lesko, Leonard H. 429
 Leskien, August 31
 Leslau, Wolf 142–3, 150, 318
 Leto 464, 466, 474
 Levin Saul 17, 42, 101, 106, 127, 147,
 159–61, 164, 170, 173, 326, 352, 378,
 396, 426, 493
 Levy, Jacob 445
 Levy Bruhl, Lucien 217
 Lewy, Heinrich 169–71, 173, 187, 254,
 266, 326, 332, 344, 347, 351, 368,
 378, 393, 397, 412, 491, 499, 556
 Liber 435

- Libya(n) 537, 540–2, 546–8, 552, 577, 579
 Linear A 92, 121–2
 Linear B 121, 187, 212, 227, 484, 516
 Lithuanian 199, 205
 Lloyd, Alan 344, 383, 509, 551
 Lloyd, G.E.R. 459
 loan(ing) (linguistic) 28
 Loprieno, Antonio 111, 193, 195, 218, 231, 385
 Lorimer, H. L. 545
 Louis XIV 38, 128
 Lucifer 556–7
 lumpers 39
 Luo 59
 Luvian 92, 131, 139
 Lycia(n) 92, 131–2, 139, 308
 Lydia(n) 92
 Lyell, Charles 33
 Lykurgos 516, 530–1, 536–7

 Macalister, R.A.S. 559
 Macedonian 129
 Mallett, D. 547, 575
 Mallory J. P. 99
 Manetho 568, 575
 Marr, Nikolai Yakovlevich 41
 Martinet, André 110
 Masai 59
 Masoretic System 190–1
 Masson, Emilia 169, 173, 345, 398, 400, 411, 423
 Masson, Michel 169–71, 326
 Masson, Olivier 205
 Matupi (cave) 65
 Mayassis, S. 446
 Mayer, Maria-Louisa 169–70, 364, 391, 409
 Mayrhofer, Manfred 363, 441
 McCall, Daniel 72
 McGready, A. G. 174
 Meillet, Antoine 110, 126, 163, 169, 173, 181, 185, 202, 229, 238, 269, 300, 304, 332–4, 346–7, 357–8, 376, 391–2, 396, 440, 463, 490
 Meineke, August 251
 Meinhof, Karl 246
 Melanesia 14
 Mellaart, James 91
 Mercury (planet) 459–60, 522
 Merkelbach, Reinhold 5–6
 Meroë, Meroitic 68
 Merrilees, R. S. 569
 Mesolithic 68
 Metonic Cycle 458
 Meyer, Eduard 5, 538
 microliths 49–51, 65
 Militarev, A. Yu 71–2, 74, 231
 Miller-Ockhuizen, Amanda 78
 millet 61
 Min 211, 282
 Minos 569
 Minotaur 547, 550, 552, 557
 Miranda, Rocky 110
 Mitanni 132
 Möller, Hermann 41, 513
 Momigliano, Arnaldo 538
 Mommsen, Theodore 181
 Mongols 168
 Montes, Anna 281
 morphology 30, 155
 Morpurgo-Davies, Anna 31, 120, 166–7
 Morris, Sarah 3
 Moses 20, 278, 298
 Movers, F. C. 173, 491
 Müller, Karl Ottfried 213–4, 454–5, 481, 507
 Müller, Max 455
 Murray, Gilbert 457
 Muses 20, 278–9, 293–4, 297–9
 Mushabian 52, 57
 Muss-Arnolt, W. 169, 173, 332, 344, 351, 367, 378, 391, 396, 510
 Mylonas, G. E. 566

 Nabta Playa 66–7, 83
 Nadene 46–7, 50, 52, 57, 87
 Nama 78
 Natufian 52, 57, 71, 74
 Naville, Eduard 468
 Neit(h) 453, 540–2, 544–51, 554, 560–3, 575–8

- Neo-Grammarians, 31–5, 115, 123, 126
 Neolithic 64–5, 70, 92–3
 Nephthys 523, 545
 Neptune 181–2
 Nestor 483–4
 Neumann, G. 211
 Newberry, Percy 544, 577
 New Guinea, Papua 14, 61
 Niebuhr, Bartholdt 181
 Niemeier, W.-D. 221
 Niger 59, 61, 63, 69
 Niger-Congo (Kordofanian) 15, 58–60, 100, 104, 432
 Niger-Saharan 59–61, 82
 Nile Delta, 341, 378, 404
 Nilo-Saharan 15, 58–60, 66, 68, 83, 104, 304, 432
 Nilsson, Martin 266, 361, 545
nisba 108
 Nitokris 541, 560–1
 Nonnos 442, 525, 527–8
 Norman Conquest 420, 486
 Norn 118
 Norse 202
 Nostratic 10, 13, 15–6, 39–44, 46, 48–50, 56–7, 80, 88–9, 92, 97–9, 101–2, 142, 308, 325, 432
 Nougayrol, Jean 180
 Nuba 60
 Nubia 89, 281
 Nubian 59, 68, 83
 Nussbaum, Alan 107, 119, 171–2, 195, 220–3, 243, 246–7, 257, 318, 323, 327, 330, 335–7, 384–5, 486, 499–501, 504, 507, 510, 517–8, 582
 Nuer 59
 nymphs 20, 230, 286–7 290, 292–4, 298

 Obenga, Théophile 104, 231
 Oita 250
 Olympus 361
 Omo 74, 89
 Omotic 12, 68, 71–5, 77–8, 81, 89, 107, 111, 228, 282
 Onians 216–7, 329, 372
 Onias 513, 537–8
 onomatopoeia 34
 Orkney, 53–5, 118
 Orel, Vladimir 70, 73, 77, 107, 113, 150, 195, 228, 300, 316, 320, 326, 330–2, 334, 337, 348, 351, 357, 359–60, 374–6, 378, 386, 391, 394–6, 402, 410, 417, 428, 436, 447
 Osiris 233, 247, 273, 286, 356, 450–1, 477–8, 516, 519, 523–5, 527–8
 Ossing, Jürgen 148
 Osthoff, Hermann 31
 Ovid 450

 Palaic 92
 Palladion 541, 544–5, 552, 563
 Pallas 552
 Pallatino, Massimo 515
 Palmer, Leonard R. 221, 496
 Panatheneia 549–51
 Parian Marble 566, 568
 Park, Rosalind 277
 Parthenon 547, 577
 Partridge, Eric 377
Pauly-Wissowa 344
 Pausanias 316, 449, 470, 495, 500, 524–5, 532, 537, 552–3, 572–3
 Pedersen, Holgar 41
 Peisistratos 547–8, 550
 Pendlebury, J.D.S. 532
 Pennacchietti, Fabrizio 318
 Perpillou, Jean-Louis 200–201, 344–5, 362
 Pettinato, Giovanni, 143
 Pherekydes 449
 Phillipson, David 62, 64–5
 Philo of Byblos 227–8, 555, 558
 phonesthemics 34
 Phrygia(n) 96, 129
 Pierce, Richard Halton 174, 271, 341, 344, 384–5
 Pindar 272, 289, 474, 478, 537
 Plato 216, 272, 283, 285, 547, 550, 563–4, 575–6, 582
 Pliny 247, 341
 Plutarch 203, 354, 470, 509, 516, 523–4, 530–2, 536, 565

- Pokorny, Julius 103, 142, 172, 182, 211,
 225, 228–9, 305, 315, 318, 321–2,
 326, 334, 350–1, 353, 358, 362, 376,
 384, 391, 395, 421, 438, 447, 502
 Pompeius Trogus 567
 Pope, Marvin 69
 Porphyry 549
 Poseidon 480, 566, 573–4
 Pott, August, Friedrich 101
 pottery 61, 64
 prothetic vowels 136–9
 Ptah 138, 453, 477–8, 572–3, 576
 punctuated equilibria 33
Pyramid Texts 279, 287, 295, 308
 pyramids, Greek 3
 Pythagoras 263
 Python 239, 467–9

 Quasimodo, Salvatore 361
 Qattara 66

 Rabin, Chaim 396
 Rapallo, Umberto 397–8
 Rask, Rasmus 31
 Ray, John 45
 Ra/Re 284, 479
 Redford, Donald 231, 233, 368
 Rendsburg, Gary 128, 330, 335–6
 Renfrew, Colin 5, 16 53–6, 92–95,
 121
 Resheph 526
 Rhea 480
 rhizomes 11
 Rift Valley 75, 77–8
 Ringe, Donald 42–43
 Robertson Smith, William 329
 Roman Empire 13
 Romance 13
 Romany 120
 Rome: Egyptian traces in 184–5; Semitic
 traces in 180–4
 Rössler, Otto 195, 198–9, 201
 rounded letters 142–53, 327–8
 Ruhlen, Merrit 39–40, 44
 Russian 30, 41–2
 Ryckmans, Jacques 144

 Sabaeans 264–5
 Sachuniathon 227
 Sais 540–2, 546, 548, 550, 562, 564, 575,
 580
 Sampson 289
 Sandawe 78–9, 89
 Sandon 251
 Sands, Bonnie 78
 Sanskrit, 30–3, 42, 118, 120, 122
 Sappho 366
 Sardinia 514
 Sardis 514–15
 satyrs 251
 Sauneron, Serge 447
 Saussure, Ferdinand de 1, 36, 216
 Scaliger, J. J. 481
 scarab 462–3
 Schlegel, Friedrich 31
 Schleicher, August 31
 Schlötzer, A. L. 29–30
 Schulze, W. 388
 Schwabe, Calvin 259
 Schwyzer, Eduard 225, 336, 390
 Scorpion (Pharaoh) 342
 Semitic: origin of name 29; origins 82–3
 Semitic and Indo-European relationship
 40
 Senwosret 568, 570–1
 Servius 346
 Seth 519, 522, 560, 574
 Sethe, Kurt 348, 438
 Shevoroshkin, Vitaly 42
 Shilluk 59
 Shnirelman, A. 71–2
 Silius Italicus 337, 561
 Simon, Erika 283, 285, 289, 295
 Siwa 478
 Skeat, W. W. 166
 Slavonic (Old Church) 104, 189
 Somali 12
 Songhai 63
 Sophokles 361, 470
 sorghums 61
 Sothic Calendar 84
 South Arabian 21, 318–19, 339
 Soviet Union 13, 41–2

- Sp3t 511–17, 519
 Sparta 512–39, 546
 Spartans and Jews 537–9
 Sphinx 465, 467, 469–71
 Spiegelberg, Wilhelm 173, 348, 401
 splitters 39
 Stalin, Joseph 41
 Starostin, Sergei 43–4, 125–6
 Starr, Chester 5
 Steiner, Richard 320
 Stephanus Byzantius, 317, 488–9, 492, 508, 518
 Stolbova, Olga 70, 73, 77, 113, 150, 195, 228, 300, 318, 326, 330–2, 334, 337, 348, 351, 357, 359–60, 374–6, 378, 391, 394–6, 402, 410, 428, 436, 447
 Strabo 467, 475, 489, 492, 507, 573
 Stracmans, Maria 281
 Stricker, B. H. 509
 Sturtevant, Edgar 36, 153
 Stuart Jones, Henry 166
 Sudan 58–60
 Sumerian 86–7, 92, 99–100, 102, 112, 114, 331
 Sutton, John 67
 Swadesh, Maurice 44–6, 120–1
 Swahili 14, 167–8
 Sybaris 369
 Szemerényi, Oswald 96, 110, 113, 123–5, 127, 132, 164, 170, 173, 221, 254, 259, 269, 302, 370–1, 385, 389, 392, 394, 403, 407, 423, 433, 517–18
 Taillardat, Jean 205–6
 Tainaron 519, 536
 Takács, Gabor 69, 79–80, 83, 100, 195, 201, 231, 237, 241, 281–2, 302, 348, 423
 Tanit 554–5, 561–3
 Tanzania 58, 78, 80
 Taygetos 519, 529, 536
 Tel Ed Daba'a 2, 305, 385
 Ten Cate, H. J. Houwink 308
 Ténéré (an) 64, 66, 83
 Thebes: Egyptian 176, 478, 504; Greek 2, 316, 466–7, 470–1, 482, 504, 564
 Tḥnw 575
 Theophrastos 371
 Thera 2, 216, 487–8
 Theseus, 140, 385, 387, 398, 483, 550, 565–6, 572
 Thesmophoria 436
 Thomason, Sarah Grey 117
 Thompson, Darcy W. 203, 215, 366–7
 Thoth 227, 459, 522, 524
 Thrace 93, 234
 Thucydides 493, 505, 530
 Thueris 280–1, 283–4, 294–5, 298
 Tiryns (ring) 285–6, 288, 290, 294–5
 Tmt, 466–7
 Tocharian 36, 95, 101, 105, 247
 Tôd Treasure 570
 Trask, R. L. 41
 trees (linguistic) 11, 28–9
 triconsonantal roots 15, 73, 75, 82
 Troizen 460–1, 477, 542, 572–5
 Troy 545, 553
 Tsakonian 141
 Tucker, Archibald 43
 Tungus 13
 Turkana Lake 63, 65, 67–8, 78
 Turkana 68
 Turkish 168
 Turnbull, Colin 303
 Tuthmosis III 161
 twin 306, 464–7
 Tylor, E. B. 1
 Tyre 19, 134, 179, 531
 Tzetzes, J. 553, 566
 Ugarit(ic) 87–8, 139
 Ukraine 94
 Ullendorff, Edward 82
 Ulu Burun *see* Kas
 Uphill, Eric 569
 Uralic 13, 29, 43, 126
 Uranos' severed genitals 196, 234, 255, 387
 Uranos 361
 Urartu (ian) 98, 133
Urheimat (concept), 15–6

- Van Berchem D. 180
 Van Windekens, A. J. 159, 201
 Varro 183, 352
 Ventris, Michael 168, 222, 364, 477
 Venus (planet) 466
 Vermeule, Emily 253, 271
 Virgil 289, 475, 561
 Vycichl, Werner 140, 148, 187, 197, 199,
 206, 241, 245, 263, 273, 314, 343,
 354, 359–60, 363, 365, 374–5, 385,
 388, 400, 406, 417; 435, 447–8

 Walcot, Peter 4
 Wallfield, J. 207
 Warren, Peter 552–3, 558, 570
 Watkins, Calvert 318
 Weingarten, Judith 284
 Weinold, Götz 110
 Wells, H. G. 5
 Welsh 319
 Wendorf, Fred 66
 West, Martin 3–6, 228, 416, 499, 526

 Westbrook, Raymond 181
 West Semitic, definition 189–90
 Wiedemann, Alfred 345, 366
 Wilamowitz-Möllendorff U. v. 251,
 457–8
 Willetts, Ronald 526
 Wolof, 100
 Worrell, W. H. 344

 Xanthos 250–1, 317
 Xhosa 81
 Xinjiang 36

 Yukagir 43

 Zabkar 252
 Zenodotos 272
 Zeus 292–3, 409, 478–9, 483, 525, 534,
 545
Zhongxue wei ti 8
 Zoroaster 132
 Zulu 81

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